

U.S. Department
of Transportation

United States
Coast Guard



COAST GUARD HELICOPTER RESCUE SWIMMER MANUAL



COMDTINST M3710.4B
28 JUL 00

U.S. Department
of Transportation

United States
Coast Guard



Commandant
U.S. COAST GUARD

2100 Second ST. SW
Washington, DC 20593-000
Staff Symbol: G-OCA
Phone: (202) 267-0952

COMDTINST M3710.4B

JUL 27 2000

COMMANDANT INSTRUCTION M3710.4B

Subj: COAST GUARD HELICOPTER RESCUE SWIMMER MANUAL

1. PURPOSE. This Manual prescribes policy, procedures, standards and instructions pertinent to all phases of helicopter rescue swimmer operations to be used by unit commanding officers and helicopter rescue swimmers.
2. ACTION. Area and district commanders, commanders of maintenance and logistics commands and unit commanding officers with aircraft assigned shall ensure the provisions of this Manual are followed. No paper distribution will be made of this Manual. Official distribution will be via the Coast Guard Directives System CD-ROM. For users on the Internet, the address is <http://isddc.dot.gov>.
3. DIRECTIVES AFFECTED. Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST 3710.4A is cancelled.
4. SUMMARY. The changes to this Manual are primarily formatting and content reorganization. Salient policy and content changes are summarized below; however, due to the significant revision of this Manual, a careful review is recommended:
 - a. Chapter 1- Removes air station staffing levels. Changed reference to the LPU-28P to RS Harness.
 - b. Chapter 2- Addition of trail line hoisting of the rescue swimmer. Warning added concerning not to disconnect the hoist hook from the RS Harness during vertical surface deployments. Warning the potential of blackout during quick stop recovery and the use of the crotch strap during recovery of an unconscious victim. Added new rear surface approach procedures. Changed aircraft vectoring procedures to reflect the use of the HH940 radio.
 - c. Chapter 3- Changed the 50 yd. Cross Chest Buddy Tow and 50 yd. Equipment tow to a 200 yd. Buddy Tow. Changed rest time between 25 yd. underwater swims to 60 seconds. Added note for Commanding Officers minimum deployment discretion.

DISTRIBUTION - SDL No. 138

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
A	1	1	1		1	1																				
B		8	10	1	3			1				50		1								10				
C	10	7									2			2												
D									*																	
E																										
F																										
G																										
H																										

NON-STANDARD DISTRIBUTION:

COMDTINST M3710.4B

- d. ANNEX's- Added new stretches. Updated RS Flight Syllabus. Updated the RS PT and deployment clothing listing. Replaced the RS Minimum Training Record and Physical Training Screening Exam Forms.

A handwritten signature in black ink, appearing to read "Terry M. Cross". The signature is stylized with large loops and a cursive script.

TERRY M. CROSS
Assistant Commandant for Operations

TABLE OF CONTENTS

CHAPTER 1 POLICIES AND REQUIREMENTS

Section A. General Helicopter Rescue Swimmer Policies	1-2
Section B. Minimum Equipment Requirements	1-5
Section C. Rescue Swimmer Training Requirements	1-6

CHAPTER 2 RESCUE SWIMMER PROCEDURES

Section A. Helicopter Rescue Swimmer Procedures	2-3
Section B. Rescue Swimmer Deployments	2-4
Section C. Survivor Approaches, Carries, and Releases	2-14
Section D. Military Aviator Equipment Release	2-29
Section E. Parachute Disentanglement	2-33
Section F. Survivors Without Flotation Procedures	2-43
Section G. Recovery Procedures	2-45
Section H. Aircraft Radio Vectoring	2-53

CHAPTER 3 RESCUE SWIMMER TRAINING REQUIREMENTS

Section A. Training Requirements Introduction	3-2
Section B. Training Requirements	3-3

ANNEX A STANDARD RESCUE SWIMMER DEPLOYMENT MESSAGE FORMAT

ANNEX B STANDARD USCG HELICOPTER RESCUE SWIMMER HAND SIGNALS

ANNEX C RESCUE SWIMMER TRAINING HEART RATE

ANNEX D STRETCH AND EXERCISE DESCRIPTION

ANNEX E RESCUE SWIMMER TRAINING "SURVIVOR" SYLLABUS

ANNEX F RESCUE SWIMMER FLIGHT SYLLABUS

ANNEX G RESCUE SWIMMER PT AND DEPLOYMENT CLOTHING

ANNEX H RESCUE SWIMMER AUTHORIZED EQUIPMENT LIST

ANNEX I RESCUE SWIMMER TRAINING RECORD AND SCREENING EXAM

ANNEX J RESCUE SWIMMER SDAP CERTIFICATION

LIST OF ILLUSTRATIONS

Figure	Title	Page
2-1	Torso Harness Fitting	2-29
2-2	Oxygen Facemask Connections	2-31
2-3	RSSK Seat Pan Oxygen Hose Guide Ring	2-32
2-4	Quick Fitting Harness Ejector Fittings	2-32

Chapter 1 Policies and Requirements Table of Contents

SECTION A. GENERAL HELICOPTER RESCUE SWIMMER POLICIES

A.1 Mission of the Coast Guard Helicopter Rescue Swimmer Program.....	1-2
A.2 Rescue Swimmer Capabilities	1-2
A.3 Concept of Operations	1-2
A.4 Rescue Swimmer Deployment Message	1-2
A.5 Rescue Swimmer Operational Procedures and Equipment	1-3
A.6 RS Operational Deployment Restriction.....	1-3
A.7 Rappelling Restriction.....	1-3
A.8 Underwater Rescue Restrictions	1-3
A.9 Procedures or Equipment Evaluation Restriction.....	1-3
A.10 Special Duty Assignment Pay.....	1-4

SECTION B. MINIMUM EQUIPMENT REQUIREMENTS

B.1 Minimum Rescue Swimmer Equipment for Operational Deployment	1-5
---	-----

SECTION C. RESCUE SWIMMER TRAINING REQUIREMENTS

C.1 RS Training Requirements Overview	1-6
C.2 EMT Certification	1-6
C.3 EMT Certification or Recertification Failure Procedures	1-6
C.4 RS Qualification Requirements.....	1-6
C.4 RS Qualification Requirements (Continued)	1-7
C.5 RS Survivor Qualification.....	1-7

Section A. General Helicopter Rescue Swimmer Policies

A.1 Mission of the Coast Guard Helicopter Rescue Swimmer Program

The primary mission of the helicopter rescue swimmer, hereafter referred to as Rescue Swimmer (RS), is to provide Rotary Wing (RW) stations with the capability of deploying a properly trained and conditioned person to assist persons in distress in the maritime environment. The stated primary mission should not be construed as a restriction on other operational requirements, when determined appropriate by the operational commander, for deployment of the rescue swimmer.

A.2 Rescue Swimmer Capabilities

The RS must have the flexibility, strength, endurance, and equipment to function for 30 minutes in heavy seas, and the skills to provide basic pre-hospital life support for the rescued individual(s). RS Emergency Medical Technician (EMT) skills may also be used during other Search and Rescue (SAR) cases in which the swimming ability is not required.

A.3 Concept of Operations

Conditions on scene will determine the need to use the RS. The crew must consider the following:

- Sea State
- Water/air temperature
- Predatory marine life
- Other environmental factors
- Ability of the RS to safely complete the mission.

The decision to deploy the RS is initiated by the pilot in command, but the RS has the authority to decline deployment if the RS assesses the situation to be beyond his/her capabilities.

A.4 Rescue Swimmer Deployment Message

A unit shall send a message after a dramatic or noteworthy case, when the rescue swimmer saves a life, when practical lessons can be learned, or when problems with RS equipment arise. The message format and a sample are shown in Annex A of this Manual.

Continued next page

Section A. General Helicopter Rescue Swimmer Policies (Continued)

A.5 Rescue Swimmer Operational Procedures and Equipment

The following Manuals are used for RS operational procedures and equipment references.

- The helicopter flight Manuals contain the pilot and flight mechanic normal and emergency procedures for RS operations.
- Helicopter Rescue Swimmer Operations Manual, COMDTINST M3710.4 (series) contains RS procedures, training and physical standards, and lists the authorized equipment for RS operations.
- The Aviation Life Support Systems Manual, COMDTINST M13520.1 (series) provides authorized RS equipment descriptions and maintenance procedures.

A.6 RS Operational Deployment Restriction

Helicopter rescue swimmers are not permitted to act as cutter swimmers, nor are cutter swimmers permitted to deploy from helicopters.

A.7 Rappelling Restriction

Rappelling formalized tree extraction procedures or equipment shall neither be used nor maintained by RS.

A.8 Underwater Rescue Restrictions

Self Contained Underwater Breathing Apparatus (SCUBA) procedures or equipment shall be neither used nor maintained by the RS. An RS shall not swim under parachutes or layers of ice. An RS shall not swim into or under a capsized or submerged vessel, aircraft, or vehicle. If deployed next to a capsized object, the RS is permitted to search visually and reach inside while maintaining a grasp on a reference point on the exterior of the object. If the RS determines that a person is trapped under or in the object and cannot be reached from the reference point, the pilot in command must request alternative assistance through the search mission coordinator or operations center.

A.9 Procedures or Equipment Evaluation Restriction

Units are not permitted to evaluate new procedures or equipment without the written authorization of Commandant (G-OCA).

Continued next page

Section A. General Helicopter Rescue Swimmer Policies (Continued)

A.10 Special Duty Assignment Pay

Operational rescue swimmers are authorized Special Duty Assignment Pay (SDAP), as provided in Special Duty Assignment Pay, COMDTINST 1430.1 (series). To be eligible, a rescue swimmer must be serving at a helicopter unit tasked to maintain helicopter rescue swimmers and fulfilling all appropriate operational and physical training requirements set (G-OCA), either by letter, message or electronic mail, that the member meets all eligibility requirements. This certification (Annex J) is due annually in January.

Section B. Minimum Equipment Requirements

B.1 Minimum Rescue Swimmer Equipment for Operational Deployment

The RS must wear appropriate protective clothing during all ground and flight operations. The type and quantity of clothing worn is determined by mission needs. Regardless of the ensemble chosen, the RS must wear an Aircrew protective helmet during take-off and landing. RS clothing is defined as follows:

CAUTION

The appropriate Flying or Water Ensemble with helmet shall be worn when being hoisted to a vessel.

(1) **Flying Ensemble.** Normal Aircrew protective clothing includes the following.

- Flight suit
- Flight gloves
- Flight boots
- Aircrew survival vest
- Protective helmet

The Flying Ensemble must be worn on all flights in which a water deployment is not likely to occur within the first 30 minutes. Aircrew flight helmet will be worn when being hoisted to land.

(2) **Water Deployment Ensemble.** Water ensembles include the following.

- Wet suit (water temperature above 55° F.)
or
- Dry suit (water temperature 55° F. and below)
- RS harness
- Fins
- Mask, and snorkel.

To increase visibility, the RS shall wear a wet/dry suit hood or surf-cap (with SOLAS grade retro-reflective tape) during all night operations, regardless of water/air temperature. A protective helmet (with SOLAS grade retro-reflective tape) shall be worn during operations conducted in surf or whitewater areas. Water Ensembles are not specifically designed for flame resistance and can cause heat stress to the RS. Aircraft commanders must consider the risks of performance degradation and lack of flame protection vs. practicality when permitting the RS to wear a water ensemble for longer than 30 minutes.

Section C. Rescue Swimmer Training Requirements

C.1 RS Training Requirements Overview

The Coast Guard Air Operations Manual, COMDTINST M3710.1 (series) contains the pilot, flight mechanic, and RS initial and recurrent flight training requirements for RS operations. The swimming, physical fitness and EMT training requirements for a RS are contained in Chapter 3 of this Manual.

C.2 EMT Certification

The RS must maintain National Registry EMT certification in accordance with Emergency Medical Services Manual, COMDTINST M16135.4 (series). Air station commanding officers are responsible for obtaining National Registry, recertification training for their RS. An RS whose EMT National Registry certification has expired is not permitted to deploy as an operational RS. Units desiring to maintain higher EMT levels of training must obtain authorization from Commandant (G-OCA).

C.3 EMT Certification or Recertification Failure Procedures

If an RS fails the initial certification or recertification test, the individual must reapply to take the certification or recertification test within thirty (30) days of notification of failure of the first test. The RS may continue to deploy as an operational RS while waiting to retake the certification or recertification test and awaiting the results. Upon notification of failure of the second test, the RS may not deploy as an operational RS. Application for a third certification or recertification test must be made within thirty (30) days of notification of failure of the second test. If the individual fails the third test, he/she must reattend the initial EMT Certification training and successfully pass the National Registry certification test before he/she may again deploy as an operational rescue swimmers.

C.4 RS Qualification Requirements

The following are RS airframe qualification requirements.

- (1) An RS designation in any type helicopter shall remain current for 15 months after the swimmers last standardization check regardless of the helicopter type assigned at the swimmers present unit.
 - (2) The Rescue Swimmer Transition Syllabus should be completed by unit swimmers when a different helicopter type (i.e. HH-60J at an HH-65A unit) is assigned temporary alert duty for periods that will allow for RS training flights.
-

Continued next page

Section C. Rescue Swimmer Training Requirements (Continued)

C.4 RS Qualification Requirements (Continued)

- (3) During instances of urgent operational necessity, an RS may deploy from any Coast Guard type helicopter after receiving a thorough passenger brief.

The following table lists differences and/or procedures between the Coast Guard HH-65A and HH-60J helicopters that should be noted.

A/F	Differences and/or Procedures
HH-65A	<ul style="list-style-type: none"> ● The handhold at the main cabin door is located on the boom stanchion. ● Do not use the pilot's seat headrest as a handhold during exit or entry while on the hoist cable. ● Limited cabin space requires careful survivor and basket management. ● While sitting in doorway, the swimmer should note the numerous sharp edges on the cabin door track, as well as a sharp edge near the in-flight refueling cover.
HH-60J	<ul style="list-style-type: none"> ● When seated in the door for a free-fall deployment, insure that you allow adequate clearance between landing gear and auxiliary fuel tank (if installed). ● Handholds are located at each side of main cabin door. ● Rotor wash is disabling to survivors who do not have adequate protection (i.e. mask and snorkel). ● Limited cabin space requires careful survivor and basket management.

C.5 RS Survivor Qualification

CAUTION

Only graduates of a formal military helicopter rescue swimmer training program is permitted to perform free-fall deployments.

Only active-duty military personnel are authorized to act as survivors on RS training flights.

Prior to flight the candidate must complete the survivor brief and questionnaire (Annex E) with a qualified RS and receive a thorough egress brief in helicopter type.

Blank Page

Chapter 2 Rescue Swimmer Procedures Table of Contents

SECTION A. HELICOPTER RESCUE SWIMMER PROCEDURES

A.1 Helicopter Rescue Swimmer Procedures Introduction.....	2-3
A.2 Equipment Inspection.....	2-3

SECTION B. RESCUE SWIMMER DEPLOYMENTS

B.1 Free Fall Deployment Procedures	2-4
B.2 Strop (Survivors) Deployment Procedures	2-5
B.3 Harness Deployment Procedures	2-6
B.4 Hoisting RS Via Harness/Strop Using Trail Line Procedures	2-7
B.5 Direct Deployment Procedures	2-8
B.6 HH-65A Ice Disembark Deployment Procedures	2-10
B.7 Ice Strop Disembark Deployment Procedures	2-11
B.8 Direct Deployment Over Solid Ice Procedures	2-13

SECTION C. SURVIVOR APPROACHES, CARRIES, AND RELEASES

C.1 Vertical Surface Walking Approach Procedures.....	2-14
C.2 Direct Deployment Water Approach.....	2-16
C.3 Rear Surface Approach	2-19
C.4 Underwater Approach.....	2-19
C.5 Front Surface Approach.....	2-21
C.6 Cross-Chest Carry	2-22
C.7 Collar Tow or Equipment Tow	23
C.8 Front Head Hold Release	2-24
C.9 Front Head Hold Escape.....	2-25
C.10 Rear Head Hold Release.....	2-26
C.11 Rear Head Hold Escape.....	2-28

SECTION D. MILITARY AVIATOR EQUIPMENT RELEASE

D.1 Introduction.....	2-29
D.2 Seawater Activated Parachute Canopy Release	2-29
D.3 USN Integrated Torso Harness Koch Fittings	2-30
D.4 USN Integrated Torso Harness Mini-Koch Fittings	2-30
D.5 Oxygen Fittings (USN/ USAF).....	2-31
D.6 Oxygen Hose Disconnection.....	2-32
D.7 Quick Fitting Harness and Ejector Fitting	2-32

SECTION E. PARACHUTE DISENTANGLEMENT

E.1 Quick Fitting Harness	2-33
E.2 Integrated Torso Harness.....	2-36
E.3 Other Types of Harnesses.....	2-39
E.4 Chest Pack (US Navy)	2-39

SECTION E. PARACHUTE DISENTANGLEMENT (CONTINUED)

E.5 Backpack (US Navy)..... 2-40
E.6 Backpack (US Air Force) 2-40
E.7 Ballooned Canopy Disentanglement 2-40

SECTION F. SURVIVORS WITHOUT FLOTATION PROCEDURES

F.1 Single Survivor 2-43
F.2 Multiple Survivors 2-43

SECTION G. RECOVERY PROCEDURES

G.1 Rescue Basket Recovery..... 2-45
G.2 Folding Rescue Litter Recovery 2-46
G.3 RS Harness Emergency Recovery 2-48
G.4 Survivors Strop/Harness Recovery of RS 2-48
G.5 RS Harness, Military Aviator Double Pick-Up 2-49
G.6 Strop (Survivors) Augmented Double Pick-Up 2-51

SECTION H. AIRCRAFT RADIO VECTORING

H.1 Aircraft Radio Vectoring Introduction..... 2-53
H.2 Radio Vectoring Commands 2-53
H.3 Radio Vectoring Advisory Reports 2-53
H.4 Aircraft Radio Vectoring Procedure Notes..... 2-54

Section A. Helicopter Rescue Swimmer Procedures

A.1 Helicopter Rescue Swimmer Procedures Introduction

This chapter establishes standard operating procedures for Coast Guard Helicopter Rescue Swimmers, hereafter referred to as Rescue Swimmer (RS). The helicopter flight Manuals contain the pilot and flight mechanic normal and emergency procedures for RS operations. These procedures shall be used when the pilot in command has elected to use the RS and the RS has assessed that the task is within his/her capabilities.

WARNING

Caution must be exercised when responding to fires involving aircraft or vessels made of composites. Inhalation of composite fibers may be harmful to personnel. Respiratory protection shall be worn when exposed to this potential hazard.

A.2 Equipment Inspection

Prior to every RS training flight, the RS will inspect and adjust all items in his/her equipment bag. At the beginning of each duty day, the RS will inspect his/her own equipment and the unit's supplemental RS SAR and EMT equipment.

Section B. Rescue Swimmer Deployments

B.1 Free Fall Deployment Procedures

The following are procedures for performing a free fall deployment.

NOTE

Free fall is used only in daylight. A strop/harness deployment is always used at night or any time conditions dictate, such as debris or broken ice in water, questionable water depth and sea state.

Step	Action
1	When directed to come forward, the RS assumes a sitting position in the doorway with the gunner's belt attached.
2	RS releases the gunner's belt when hoist operator taps the RS once on the chest.
3	RS gives "thumbs up signal" (RS Hand Signals Annex B) to hoist operator when the RS is ready.
4	After hoist operator taps RS three times on right shoulder and the RS has checked the altitude and the area clear of debris, RS jumps from aircraft.
5	Immediately upon clearing aircraft, RS places left hand on face mask and right arm across the chest. Elbows should be tucked in tight to the chest, and knees slightly bent with swim fins pointing up.
6	After water entry, RS approaches the surface with mask clear, arm raised palm open.
7	Having surfaced, the RS signals "I am all right" (RS Hand Signals Annex B). No acknowledgment signal from the hoist operator is required.
8	After giving signal, the RS swims toward survivor.

Continued next page

Section B. Rescue Swimmer Deployments (Continued)

B.2 Strop (Survivors) Deployment Procedures

The following are procedures for performing a strop deployment.

NOTE

A strop deployment is always used at night or any time conditions dictate, such as debris or broken ice in water, questionable water depth and sea state.

Step	Action
1	<p>When directed to come forward, the RS assumes a sitting position in the doorway with the gunner's belt attached and the survivor's strop positioned under the arms of the RS.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">Prior to being lowered at night or during low visibility conditions, the RS and the rescue hook shall be illuminated by 4-inch chemical lights.</p>
2	RS releases the gunner's belt when hoist operator taps the RS once on the chest.
3	RS gives "thumbs up signal" to hoist operator when the RS is ready.
4	RS keeps arms crossed over strop while being lowered to the water. The strop safety straps are not used during this maneuver.
5	While being lowered on the strop, the RS should try to maintain visual contact with the survivor. Turning of the hoist cable may prevent constant visual contact.
6	After being fully immersed in the water, the RS slips out of the strop and signals "I am all right." (RS Hand Signals Annex B).
7	After giving hand signal, the RS swims toward survivor.

Continued next page

Section B. Rescue Swimmer Deployments (Continued)

B.3 Harness Deployment Procedures

The following are procedures for performing a harness deployment.

NOTE

A harness deployment is always used at night or any time conditions dictate, such as debris or broken ice in water, questionable water depth and sea state.

Step	Action
1	<p>When directed to come forward, the RS assumes a sitting position in the doorway with the gunner's belt attached and the hoist hook connected directly to the lifting "V" ring on the RS Harness.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">Prior to being lowered at night or during low visibility conditions, the RS and the rescue hook shall be illuminated by 4-inch chemical lights.</p>
2	RS releases the gunner's belt when hoist operator taps the RS once on the chest.
3	RS gives "thumbs up signal" to hoist operator when the RS is ready.
4	Hoist operator will stop hoisting once RS is clear of deck to allow the RS to check harness for comfort. RS will then give the hoist operator the "thumbs up signal" when ready to continue hoist.
5	While being lowered on the RS harness, the RS should try to maintain visual contact with the survivor. Turning of the hoist cable may prevent constant visual contact.
6	After being fully immersed in the water, the RS disconnects from the rescue hook and signals "I am all right." (RS Hand Signals Annex B).
7	After giving hand signal, the RS swims toward survivor.

Continued next page

Section B. Rescue Swimmer Deployments (Continued)

B.4 Hoisting RS Via Harness/Strop Using Trail Line Procedures

WARNING

This delivery shall not be attempted without the use of the trail line quick-release.

The trail line hoisting of the rescue swimmer may be used when delivering the rescue swimmer to a vessel only. It is not to be used for water deliveries or recoveries. The trail line method is ideal for situations when stability of the rescue swimmer is desired for delivery to an unstable vessel. This technique may be used with the harness and strop deployment only, in conjunction with the trail line quick-release.

The trail line quick release is a stainless steel snap shackle, which will release under a load. The trail line quick release has three main components; a beaded release handle, a fixed eye, and a gated eye. During use of the trail line quick-release, the gated eye is connected to the equipment attachment ring on the hoist hook. To release the trail line from the hoist hook, the RS shall pull the beaded handle and release.

NOTE

At any time should the RS feel that he/she is in danger of entanglement, they may release themselves from the trail line by activating the Trail Line Quick Release.

Step	Action
1	When directed to come forward, the RS assumes a sitting position in the doorway with the gunner's belt attached. The RS harness/strop is connected to the hoist hook, with the trail line quick disconnect attached to the equipment attachment ring on the hoist hook.
2	During the "swimmer check" the RS releases the gunner's belt when the hoist operator taps the RS once on the chest.

Continued next page

Section B. Rescue Swimmer Deployments (Continued)

B.4 Hoisting RS Via Harness/Strop Using Trail Line Procedures (Continued)

The following is the continuation of the hoisting an RS via harness/strop using a trail line procedure.

Step	Action
3	RS gives the “thumbs up signal” to hoist operator when the RS is ready.
4	To accomplish the “load check” the hoist operator will hoist the RS clear of the deck to allow the RS to check harness/strop for comfort. RS will then give the hoist operator the “thumbs up signal” when ready to be repositioned in the door.
5	Hoist operator will begin the delivery of the trail line to the vessel.
6	Once the trail line is paid-out, the hoist operator will connect the weak link end of the trail line to the fixed ring end of the trail line quick-release.

B.5 Direct Deployment Procedures

The following are procedures for performing a direct deployment.

WARNING

When using this procedure in heavy seas, the aircrew must take extreme care with the varying amounts of cable that may be paid out. Too little cable may cause the RS to be jerked out of the water as he/she enters the trough of the wave. Too much cable may cause the RS or survivor to become entangled in the cable prior to pickup. When used in high winds the aircrew must monitor wind gusts to compensate for sudden movements of the aircraft. During vertical surface operations, the RS shall not disconnect from the hoist hook.

Continued next page

Section B. Rescue Swimmer Deployments (Continued)

B.5 Direct Deployment Procedures (Continued)

The following is the continuation of the direct deployment procedures.

CAUTION

Do not send the strop to survivors without the RS, as it may become caught on entanglement hazards and survivors may not know how to properly use it.

Step	Action
1	When directed to come forward, the RS assumes a sitting position in the doorway with the gunner's belt attached. The RS harness and quick strop, with the detach-able side of the strop (identified by the red webbing) on the outboard side, are connected to the hoist hook. The RS positions the quick strop on either shoulder with the friction keeper slide close to the hoist hook.
2	RS releases the gunner's belt when the hoist operator taps the RS once on the chest.
3	RS gives the "thumbs up signal" to hoist operator when the RS is ready.
4	RS maintains control over quick strop while being hoisted clear of the deck. Hoist operator will stop hoisting once RS is clear of deck to allow the RS to check harness for comfort. RS will then give the hoist operator the "thumbs up signal" when ready to continue hoist.
5	While being lowered in the harness, the RS should try to maintain visual contact with the survivor. Turning of the cable may prevent constant visual contact. NOTE If being hoisted to the water, RS should be placed within 2-3 feet of the survivor.

Continued next page

Section B. Rescue Swimmer Deployments (Continued)

B.5 Direct Deployment Procedures (Continued)

The following is the continuation of the direct deployment procedures.

Step	Action
5 (Continued)	<p style="text-align: center;">NOTE</p> <p>If being hoisted to a vertical surface, the aircrew shall assess the situation and hoist the RS in a way that avoids an approach that endangers the survivor with the cable, falling debris, rotor-wash, or other hazards. The hoist operator should conn the aircraft to a position that allows the RS to maintain positive contact with the vertical surface. Once in positive contact with the vertical surface, the RS maintains a rappelling position and does not climb, instead using the hoist to reposition vertically. Conn the aircraft to the survivor using cliff walking techniques and appropriate hand signals (Annex B).</p>

B.6 HH-65A Ice Disembark Deployment Procedures

The following are procedures for performing an ice disembark deployment.

WARNING

The rescue line is not connected in any way to the aircraft.

CAUTION

Do not expose survivor to rotor wash prior to RS contact, as this may cause survivor to slide radically on ice, possibly causing injury.

Step	Action
1	When directed to come forward, the RS assumes a sitting position in the doorway with the gunner's belt attached.

Continued next page

Section B. Rescue Swimmer Deployments (Continued)

B.6 HH-65A Ice Disembark Deployment Procedures (Continued)

The following is the continuation of the ice disembark deployment procedures.

Step	Action
2	After the "Check Swimmer" command, the RS exchanges the aircraft gunner's belt for the modified gunner's belt attached to the rescue line.
3	RS gives "Thumbs Up" signal (RS Hand Signals Annex B) when RS is ready.
4	The aircraft maintains wheels lightly on the ice.
5	After the "Deploy Swimmer" command, the RS exits the aircraft, steps onto the ice and proceeds to the survivor.
6	If survivor is ambulatory, he/she is to follow safety line hand over hand to helo. If not ambulatory, the RS shall assist as necessary.

B.7 Ice Strop Disembark Deployment Procedures

The following are procedures for performing an ice strop disembark deployment.

WARNING

The rescue line is not connected in any way to the aircraft.

CAUTION

Do not expose survivor to rotor wash prior to RS contact, as this may cause survivor to slide radically on ice, possibly causing injury.

Continued next page

Section B. Rescue Swimmer Deployments (Continued)

B.7 Ice Strop Disembark Deployment Procedures (Continued)

The following is the continuation of the ice strop disembark deployment procedures.

Step	Action
1	When directed to come forward, the RS assumes a sitting position in the doorway with the gunner's belt attached and the survivor strop positioned under the RS arms.
2	RS releases the gunner's belt when hoist operator taps the RS once on the chest.
3	RS gives "Thumbs Up" signal (RS Hand Signals Annex B) to hoist operator when the RS is ready.
4	RS keeps arms crossed over strop while being lowered to the ice. The sling safety straps are not used during this maneuver.
5	Once on the ice, the RS slips out of the strop and signals "I am all right" (RS Hand Signals Annex B).
6	The FM retrieves the strop and lowers the modified gunner's belt with rescue line attached to the RS.
7	The RS attaches the modified gunners belt and proceeds to the survivor.
8	RS has survivor lie down on ice and calls for appropriate rescue device.
9	Helo moves into position. RS removes modified gunners belt for retrieval by flight mechanic. Survivor and RS are hoisted using established procedures.

Continued next page

Section B. Rescue Swimmer Deployments (Continued)

B.8 Direct Deployment Over Solid Ice Procedures

The following are procedures for performing a direct deployment over solid ice.

CAUTION

Do not expose survivor to rotor wash prior to RS contact, as this may cause survivor to slide radically on ice, possibly causing injury.

Step	Action
1	Keeping survivor outside rotor wash, RS performs Direct Deployment to the ice, and proceeds to the survivor.
2	If a Direct Deployment recovery is not practical, RS disconnects hoist hook and signals for appropriate rescue device.
3	RS and survivor are hoisted using established procedures.

Section C. Survivor Approaches, Carries, and Releases

C.1 Vertical Surface Walking Approach Procedures The following are procedures for performing a vertical surface walking approach.

WARNING

During a vertical surface deployment, the RS shall not disconnect the hoist hook from their harness.

WARNING

In the event the survivor grabs the RS preventing the application of the strop; the RS shall immediately grip the survivor under the arms and inter-lock his/her hands. The flight mechanic shall immediately recognize this situation as an emergency, conn the aircraft away from the vertical surface down as low as safely possible and continue the hoist either into the aircraft or to the surface as appropriate.

WARNING

Whenever hoisting using the quick strop, a possibility exists for the survivor to lose consciousness during the actual hoisting phase. When hoisting with the quick strop and the survivor facing away from the RS, the possibility for the survivor to lose consciousness is greater.

The RS should include specific landmarks on the pre-briefed route, as it may be difficult to maintain visual contact with the survivor once in positive contact with the vertical surface. This route should avoid exposing the survivor to falling debris, rotor wash, or any other hazards. Avoid overhangs that may contact and damage the hoist cable.

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.1 Vertical Surface Walking Approach Procedures (Continued) The following is the continuation of the vertical surface walking approach procedures.

Step	Action
1	The RS, while using the RS harness, bends 90 degrees at the waist, fully extends the legs, keeping the knees slightly bent and contacts the vertical surface with his/her boots in a rappelling position. The RS is supported by the hoist cable and is not to be a "climber".
2	The RS walks on the vertical surface, giving the appropriate hand signals to conn the aircraft along the pre-briefed approach route to the survivor.
3	<div data-bbox="651 871 1377 1140" style="border: 1px solid black; background-color: #e0e0e0; padding: 10px; text-align: center;"> <p>WARNING</p> <p>Failure to connect the crotch strap on an unconscious or incapacitated survivor may result in survivor slipping out of the quick stop.</p> </div> <p>If the survivor is facing the RS:</p> <p>Using the same shoulder that the Quick Strop is on, the RS grasps the wrist of the survivor. RS slides the strop down his/her arm and up the survivor's arm, maneuvering the strop over the survivor's head and other arm. RS then snugs the strop under survivor's armpits, slides friction keeper as tight as possible and holds with one hand.</p> <p>If the survivor is facing away from the RS:</p> <p>The RS disconnects one side of the strop (identified by the RED webbing), feeds it around the survivor, then feeds it back through the friction keeper, and reconnects to the hoist hook. Snugs the strop under the armpits, slides friction keeper as tight as possible, and hold in place with one hand.</p>

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.1 Vertical Surface Walking Approach Procedures (Continued) The following is the continuation of the vertical surface walking approach procedures.

Step	Action
4	RS then signals "Ready For Pickup", followed by pointing away from the vertical surface to indicate "Ready to lose positive contact".
5	<div data-bbox="630 646 1386 949" style="border: 1px solid black; padding: 10px; text-align: center;"><p>WARNING</p><p>It is imperative that the RS keep his/her hand on the friction keeper and as tight as possible to the survivor, with legs around survivor's arms until both RS and survivor are secure on the deck of the aircraft.</p></div> <p>The survivor is brought into the cabin first regardless of whether he/she is facing toward or away from the RS.</p>

C.2 Direct Deployment Water Approach

The following are procedures for performing a direct deployment water approach.

WARNING

Whenever hoisting using the quick strop, a possibility exists for the survivor to lose consciousness during the actual hoisting phase. When hoisting with the quick strop and the survivor facing away from the RS, the possibility for the survivor to lose consciousness is greater. For this reason, any training hoist of a live "survivor" with the quick strop in the facing away position shall be limited to 10 feet. The survivor shall then be lowered to the water where he/she shall be repositioned to face the RS, and hoisting can continue.

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.2 Direct Deployment Water Approach (Continued)

The following is the continuation of the direct deployment water approach procedures.

Step	Action
1	The RS is lowered to a position just above the water's surface.
2	The aircraft is conned to a position that allows the RS to be lowered into the water and placed within 2-3 feet of the survivor.
3	<div data-bbox="625 730 1377 993" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>WARNING</p> <p>Failure to connect the crotch strap on an unconscious or incapacitated survivor may result in survivor slipping out of the quick strop.</p> </div> <p>Using the same shoulder that the quick strop is on, the RS grasps the wrist of the survivor, slides the strop down his/her arm and up the survivor's arm, maneuvers the strop over the survivor's head and other arm, snugs the strop under survivor's arm pits, slides friction keeper as tight as possible and holds with one hand.</p>
4	<div data-bbox="641 1293 1377 1556" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>WARNING</p> <p>Failure to connect the crotch strap on an unconscious or incapacitated survivor may result in survivor slipping out of the quick strop.</p> </div> <p>If the survivor is facing away from the RS, the strop is placed over the head and shoulders, snugged into the armpits and the friction keeper is secured. The strop may also be applied by moving the strop over the feet and up the body to the armpits.</p>

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.2 Direct Deployment Water Approach (Continued)

The following is the continuation of the direct deployment water approach procedures.

Step	Action
5	RS signals "Ready For Pickup".
6	<p>When dealing with severe hypothermia, employ the double-lift method. The survivor strop is used in conjunction with the quick strop to hoist the survivor in a semi-supine position.</p> <ul style="list-style-type: none">a. The survivor strop is attached to the hoist hook between the harness and the quick strop.b. Once in the water, place the survivor strop around the survivor's torso and attach the safety strap.c. Move down to the legs and slide the quick strop up the legs and under the knees.d. Secure the friction keeper and signal "Ready For Pick-up". Straddle the survivor while being hoisted.
7	<div style="border: 1px solid black; padding: 10px; text-align: center;"><p>WARNING</p><p>It is imperative that the RS keep his/her hand on the friction keeper and as tight as possible to the survivor, with legs around survivor's arms until both RS and survivor are secure on the deck of the aircraft.</p></div> <p>The survivor is brought into the cabin first regardless of whether he/she is facing toward or away from the RS.</p>

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.3 Rear Surface Approach

The following are procedures for performing a rear surface approach.

NOTE

Prior to executing the following approach, the RS should attempt to establish comms with survivor.

Step	Action
1	Approach the survivor with head out of the water and eyes on the survivor.
2	With forward momentum, grab survivor under the armpits and rotate towards the RS.
3	Secure survivor in a cross-chest; collar tow, or equipment carry.

C.4 Underwater Approach

The following are procedures for performing an underwater approach.

WARNING

Do not use an underwater approach when a raft, lines, debris, or a parachute is attached to or in the immediate vicinity of the survivor.

NOTE

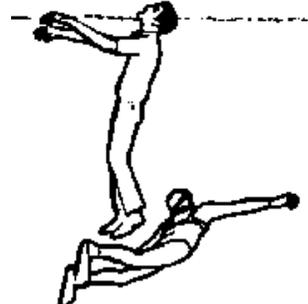
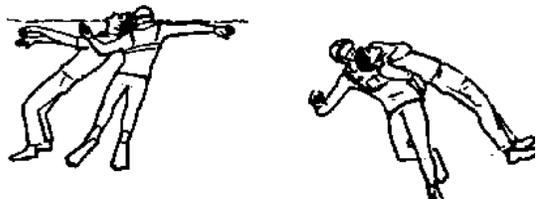
Prior to executing the following approach, the RS should attempt to establish comms with survivor.

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.4 Underwater Approach (Continued)

The following is the continuation of the underwater approach procedures.

Step	Action	Example
1	Approach the survivor with head out of the water and eyes on the survivor.	
2	<p>Upon reaching a distance of 6 to 8 feet from the survivor, execute a surface dive and swim under the survivor.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">The RS must be aware of the added buoyancy of the wet/dry suit and avoid premature surfacing.</p>	
3	Execute a half turn (survivor's back should be toward RS) and surface.	
4	While surfacing, place survivor in a controlled cross-chest carry.	

Continued next page

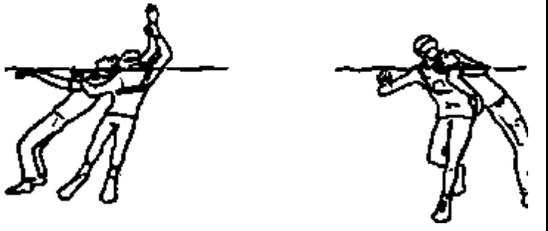
Section C. Survivor Approaches, Carries, and Releases (Continued)

C.5 Front Surface Approach

The following are procedures for performing an front surface approach.

NOTE

Prior to executing the following approach, the RS should attempt to establish comms with survivor.

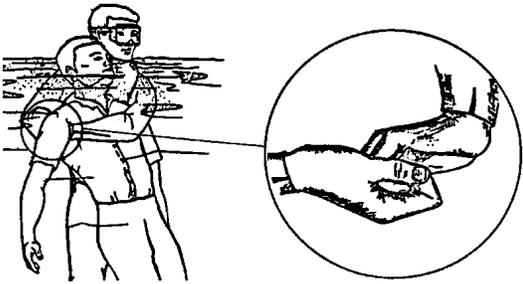
Step	Action	Example
1	Approach the survivor with head out of the water and eyes on the survivor.	
2	Upon reaching an arms-length distance from the survivor, execute a quick reverse.	
3	Timing the movement, the RS crosses their arm over the survivor's arm and firmly grasps the back of the survivor's wrist, right hand to right wrist, or left hand to left wrist. The RS then leans back and pulls the survivor's arm across and in front of the RS's body, turning the survivor around.	
4	When the survivor's back is fully turned, the RS places the survivor in a cross- chest, collar tow, or equipment carry.	

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.6 Cross-Chest Carry

The following are procedures for performing a cross-chest carry.

Step	Action	Example
1	From a position behind the survivor's shoulder or under survivor's arm, the RS reaches across the chest and pulls the survivor from under the armpit with the back of the RS's hand.	
2	The survivor's shoulder is then tucked securely into the armpit of the RS and the arm firmly clamped against the survivor's chest.	
3	The RS turns to the side with the hip directly against the small of the survivor's back, the RS strokes vigorously with the legs, using a flutter kick to provide propulsion.	
4	<p>Should the survivor be aggressive, the RS shall lock his/her free hand under the survivor's armpit.</p> <p style="text-align: center;">NOTE</p> <p>This procedure may be difficult to perform on military aircrew-members due to their flotation and survival equipment. The equipment carry is appropriate in this situation.</p>	

Continued next page

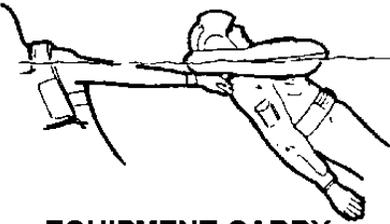
Section C. Survivor Approaches, Carries, and Releases (Continued)

C.7 Collar Tow or Equipment Tow

The following are procedures for performing a collar tow or equipment tow.

WARNING

Do not grasp the survivor in a manner, which may result in restricted breathing or circulation.

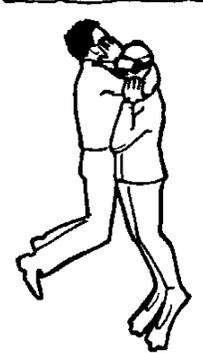
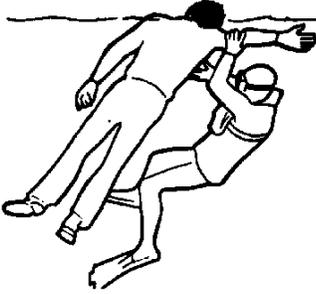
Step	Action	Example
1	Grasp the survivor's shirt collar or flight equipment from behind and between the shoulder blades.	 <p>EQUIPMENT CARRY - HOLD ON HARNESS</p>  <p>COLLAR TOW</p>
2	The RS assumes the sidestroke position and strokes vigorously with the legs, using a flutter kick.	

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.8 Front Head Hold Release

The following are procedures for performing a front head hold release.

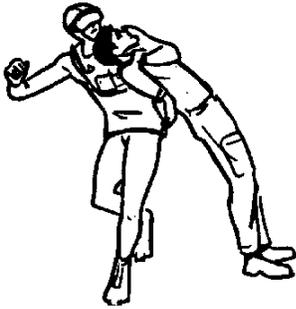
Step	Action	Example
1	As soon as the survivor's arms are felt encircling the head, the RS tucks their chin down and to the side while taking a quick "bite" or breath of air. RS submerges, taking the survivor under.	
2	<p>If survivor's head is on the right of RS's head. The RS brings their right arm up and over the encircling arm, and places hand securely against survivor's right cheek, the little finger against the side of survivor's nose, and thumb hooked under the jaw.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">Should the survivor's head be on the left side of the RS, the method is reversed.</p>	
3	The remaining hand is brought up beneath the survivor's other arm seizing it in a grip with the thumb just above the elbow.	
4	In one continuous motion, the survivor's head is pressed out and around with the right hand over the RS's head and sweeping it across to the far side. This is a continuous movement until the survivor's back is to the RS.	

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.8 Front Head Hold Release (Continued)

The following is the continuation of the front head hold release procedures.

Step	Action	Example
5	<p>The left hand continues to hold the arm until it can be move into a cross chest carry, then the right hand is shifted from the survivor's face to the chest to lock in the controlled cross-chest carry.</p> <p style="text-align: center;">NOTE</p> <p>Should the survivor's head be on the left side of the RS, the method is reversed.</p>	
6	<p>If survivor places a scissors lock on the RS with their legs, the scissors rarely is held after the head hold is released. However, if it is not released, the RS uses one hand between the ankles to unlock the crossed feet.</p>	

C.9 Front Head Hold Escape

The following are procedures for performing a front head hold escape.

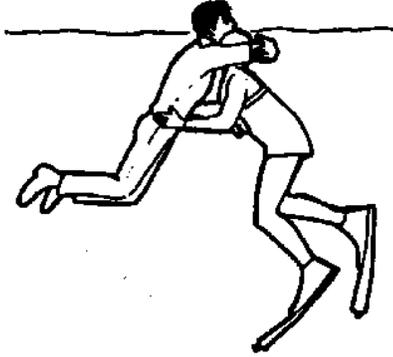
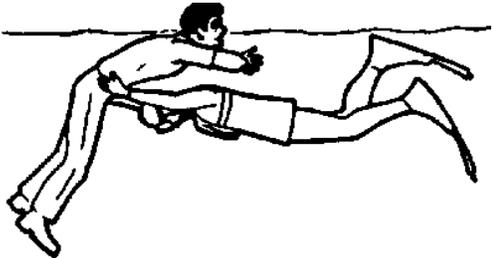
Step	Action	Example
1	<p>As soon as the survivor's arms are felt encircling the head, the RS tucks their chin down and to the side, takes a quick "bite" or breath of air, and submerges with the survivor.</p>	

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.9 Front Head Hold Escape (Continued)

The following is the continuation of the front head hold escape procedures.

Step	Action	Example
2	Without pause, the RS places both hands on the front of the survivor's hips with heels of the hands against the body; fingers extended, and thumbs grasping the survivor's sides. By forcefully pressing and extending the arms, the RS pushes the survivor's body back and up toward the horizontal position. This leverage will loosen the survivor's grasp.	
3	By tucking the chin inward and hunching the shoulders, the RS head is freed. Survivor is then pushed away.	

C.10 Rear Head Hold Release

The following are procedures for performing a rear head hold release.

Step	Action	Example
1	As soon as the survivor's arms are felt encircling RS head, the RS tucks their chin down and to the side, takes a quick "bite" or breath of air, and then submerges with survivor.	

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.10 Rear Head Hold Release (Continued)

The following is the continuation of the rear head hold release procedures.

Step	Action	Example
2	The RS places both hands on survivor's top arm wrist, and pulls down toward the RS's hips, rotating the hand and sliding the other hand up to the survivor's elbow.	
3	<p>By twisting inward and down on the survivor's wrist, and pushing survivor's elbow upward, the grip is released.</p> <p>Survivor's forearm is straight across survivor's back and survivor is in front of RS.</p>	
4	From this position behind survivor, the RS places survivor in a controlled cross-chest carry.	

Continued next page

Section C. Survivor Approaches, Carries, and Releases (Continued)

C.11 Rear Head Hold Escape

The following are procedures for performing a rear head hold escape.

Step	Action	Example
1	Upon feeling survivors' arm encircling his/her head, the RS immediately tucks their chin down and to the side, takes a quick "bite" or breath of air, and submerges with the survivor.	
2	RS brings the hands up to underside of each of the survivor's elbows. While keeping their chin tucked in and hunching the shoulders, RS pushes forcefully upward freeing the head.	
3	Survivor is then pushed back. RS turns to face survivor prepared to prevent subsequent grasps.	
4	RS swims well out of reach of survivor, surfaces, and decides which rescue procedure to use.	

Section D. Military Aviator Equipment Release

D.1 Introduction

CAUTION

Rescue Swimmers must be aware that military aviators will often be tethered to their life raft and possibly entangled in the raft's retaining line and/or drogue line, and/or the parachute shroud lines.

D.2 Seawater Activated Parachute Canopy Release

Some military aviators may be equipped with a Seawater Activated Parachute Canopy release system (SEAWARS). This system is designed to automatically release the aviator's parachute risers and canopy upon immersion in seawater. The RS must manually release all other equipment as described below. In the event, SEAWARS does not function; the RS must be prepared to release the aviator's parachute manually.

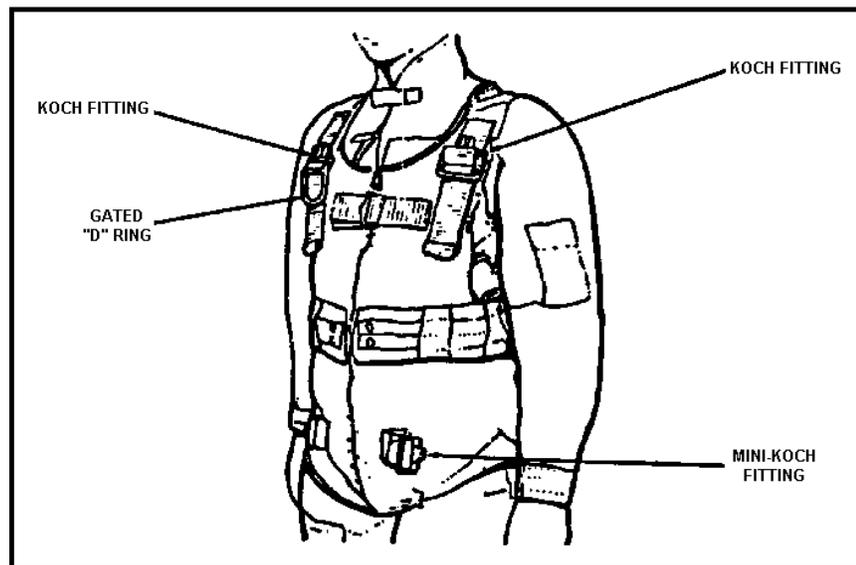


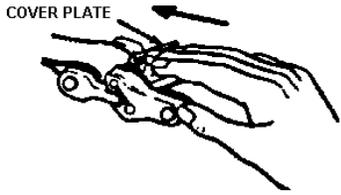
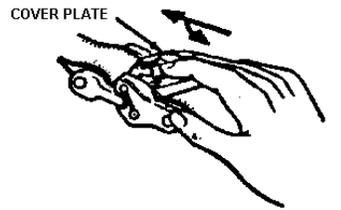
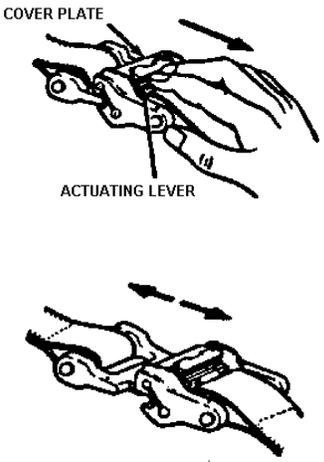
Figure 2-1 Torso Harness Fittings

Continued next page

Section D. Military Aviator Equipment Release (Continued)

D.3 USN Integrated Torso Harness Koch Fittings

The USN Integrated Torso Harness Koch Fittings are located on each shoulder. (See figure 2-1), these are released using the following procedures.

Step	Action	Example
1	Lift the cover plate.	 <p>COVER PLATE</p>
2	Push down on locking bar.	 <p>COVER PLATE</p>
3	While holding the locking bar down separate the fitting.	 <p>COVER PLATE</p> <p>ACTUATING LEVER</p>

D.4 USN Integrated Torso Harness Mini-Koch Fittings

Located on the lap belt (Figure 1). Connects the Rigid Seat Survival Kit (RSSK) to the aviator and is released in the same manner as shoulder Koch fittings.

NOTE

Air Force Koch fittings are reverse of USN fittings.

Continued next page

Section D. Military Aviator Equipment Release (Continued)

D.5 Oxygen Fittings (USN/ USAF)

Four types of oxygen facemask connections are currently in use. These fittings are located on each side of the aviator's helmet (Figure 2-2).

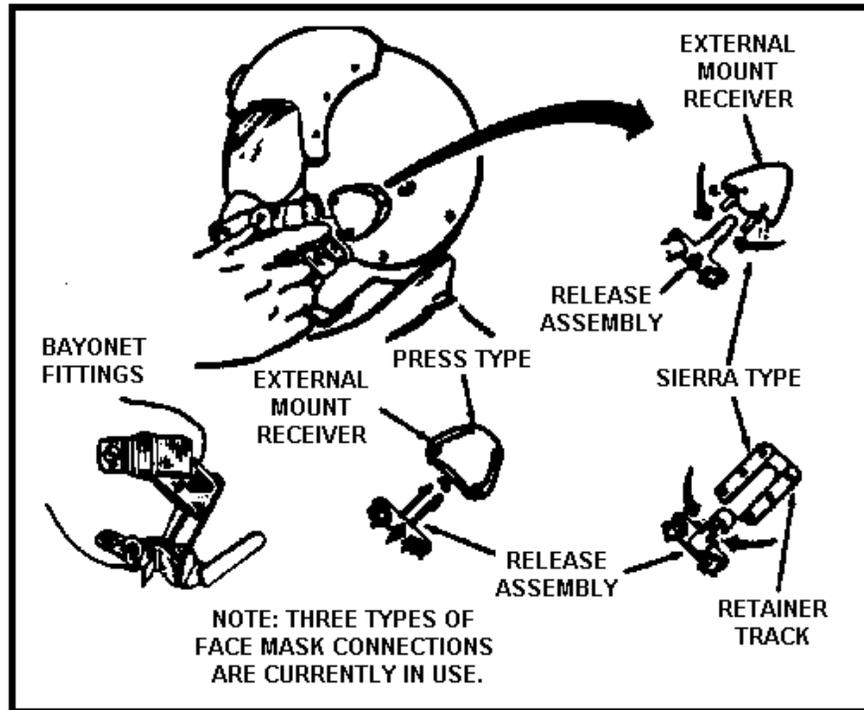


Figure 2-2 Oxygen Facemask Connections

- **Press type** - Press the fitting in towards the face and pull away to release the mask.
- **Bayonet fittings** - Push tab releases located on the sides of mask away from face.
- **Sierra fittings (Track Mounted)** - Squeeze the pinch lever release mechanism located on the helmet side of the fitting and pull away from face.
- **Sierra fittings (Fixed Mounted)** - Squeeze the pinch lever release located on the mask side of fitting and pull away from face.

Continued next page

Section D. Military Aviator Equipment Release (Continued)

D.6 Oxygen Hose Disconnection

The oxygen hose is connected to the RSSK seat pan by a quick release bayonet fitting. To release, lift guide ring and pull out (Figure 2-3).

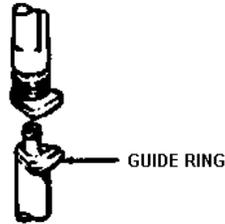


Figure 2-3 RSSK Seat Pan Oxygen Hose Guide

D.7 Quick Fitting Harness and Ejector Fitting

There are three types of quick fitting harnesses currently being used by Navy aircrew members. All have the same quick ejector fittings. One fitting is located on the chest and one on each leg. To release the quick ejector fittings, pull up on the lever (Figure 2-4).

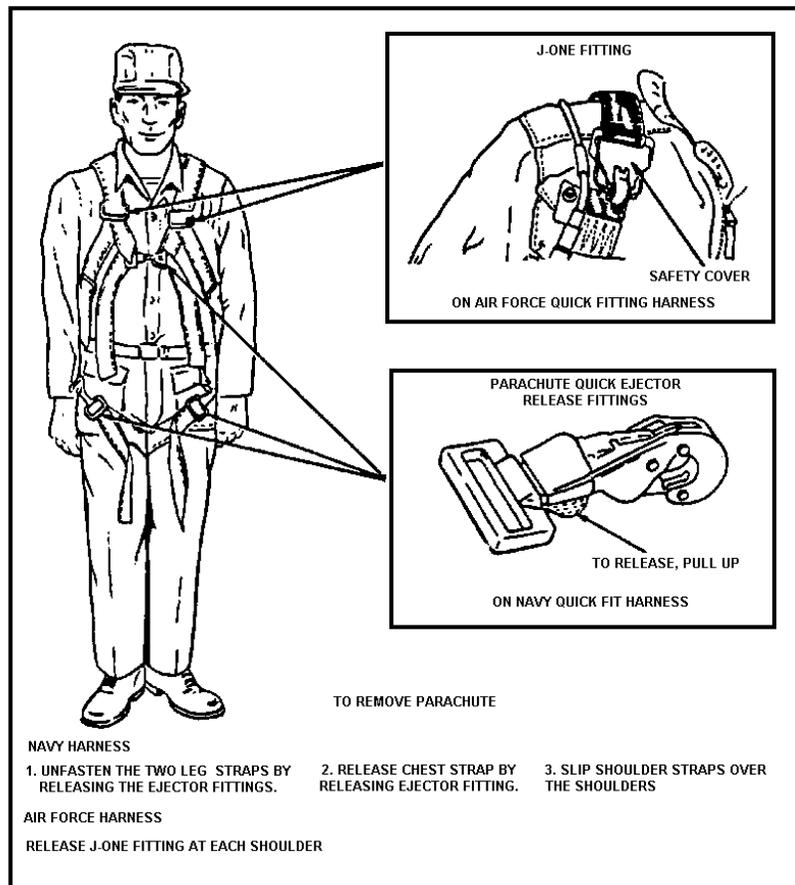


Figure 2-4 Quick Fitting Harness Ejector Fittings

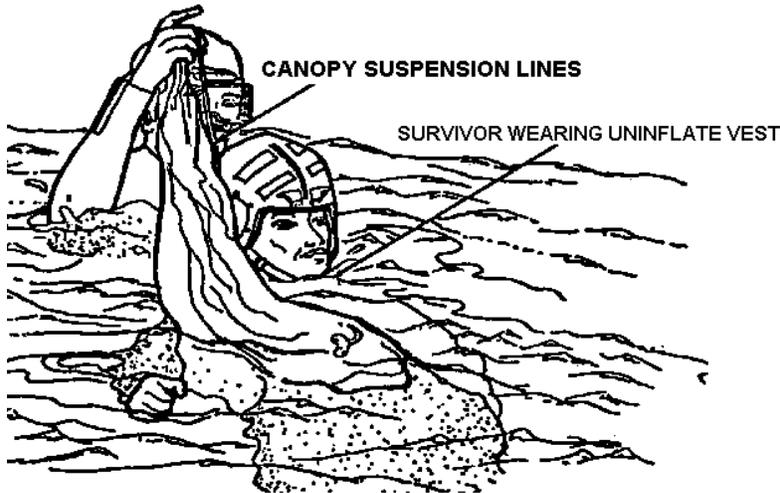
Section E. Parachute Disentanglement

E.1 Quick Fitting Harness

The following are procedures for performing quick fitting harness parachute disentanglement.

WARNING

The parachute must never be allowed to come between the RS and the survivor, as the RS could lose sight of the survivor or become entangled in the parachute or suspension lines.

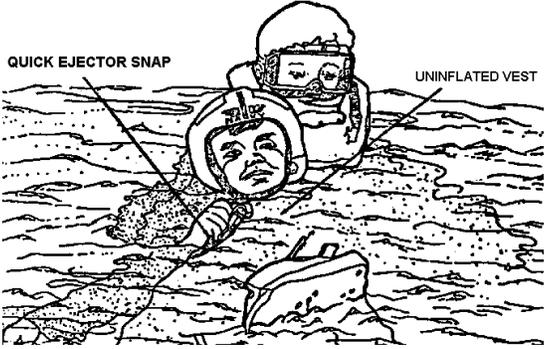
Step	Action
1	Approach survivor and establish communications to determine the condition of the survivor. Using rear surface approach, grasp survivor's harness between the shoulder blades and pull into the wind and away from the parachute canopy.
2	Remove oxygen mask. Clear the survivor's head, neck, and chest area of suspension lines 

Continued next page

Section E. Parachute Disentanglement (Continued)

E.1 Quick Fitting Harness (Continued)

The following is the continuation of the quick fitting harness parachute disentanglement procedures.

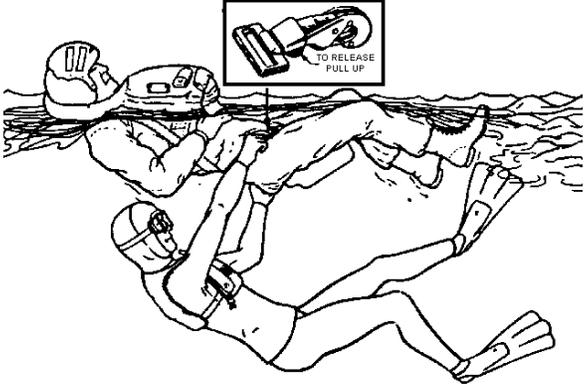
Step	Action
3	<div data-bbox="626 415 1399 758" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>WARNING</p> <p>Survivor may be wearing a flotation device; therefore, the RS shall disconnect the chest quick ejector snaps before inflating the device. Inflating the device before disconnecting chest ejector snap could crush survivor's chest or restrict breathing.</p> </div> <p data-bbox="618 793 1300 863">Disconnect chest quick ejector snap and inflate survivor's flotation device.</p> <div data-bbox="740 898 1284 1247" style="text-align: center;">  <p>The illustration shows a person in a survival suit floating in choppy water. A hand is shown reaching towards a 'QUICK EJECTOR SNAP' on the chest. An 'UNINFLATED VEST' is also visible on the chest area.</p> </div>
4	<div data-bbox="636 1276 1377 1619" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>WARNING</p> <p>Suspension lines shall be cut only if necessary. Do not use an open-bladed knife when cutting suspension lines. The survivor and/or the RS could be injured severely in the process. Use a hook knife (pocket shroud cutter).</p> </div> <p data-bbox="618 1654 1349 1829">Remove parachute suspension lines from survivor. Using spinal cord of survivor as a reference, submerge and proceed hand over hand along the back, always keeping one hand on survivor. Submerge as many times as necessary to remove all suspension lines.</p>

Continued next page

Section E. Parachute Disentanglement (Continued)

E.1 Quick Fitting Harness (Continued)

The following is the continuation of the quick fitting harness parachute disentanglement procedures.

Step	Action
5	<p>Release the survivor's leg quick ejector snaps when progressing down the body.</p> 
6	<p>Remove shoulder straps, then free survivor of suspension lines and leg snaps and continue pulling survivor into the wind. If survivor is still not free of the harness and parachute, use the washboard method as follows:</p> <div data-bbox="636 1140 1377 1367" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>WARNING</p> <p>Do not use the washboard method if survivor has back injury.</p> </div> <ol style="list-style-type: none"> a. With both hands hold survivor by the back of flotation device. b. In quick succession, push and pull survivor fore and aft. Make sure that survivor's head is kept above water.
7	<p>Submerge and perform a final check to ensure that all suspension lines are free of survivor and that harness is clear.</p>
8	<p>Ensuring the area is well clear of all floating debris, signal helicopter "ready for pickup" (RS Hand Signals Annex B).</p>

Continued next page

Section E. Parachute Disentanglement (Continued)

E.2 Integrated Torso Harness The following are procedures for performing integrated torso harness parachute disentanglement.

WARNING

The parachute must never be allowed to come between the RS and the survivor, as the RS could lose sight of the survivor or become entangled in the parachute or suspension lines.

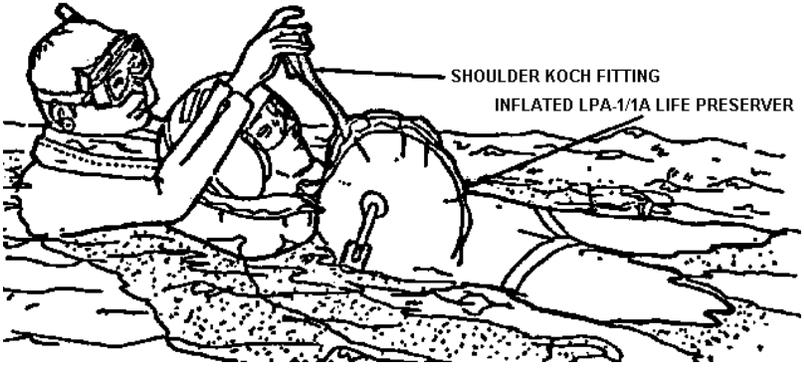
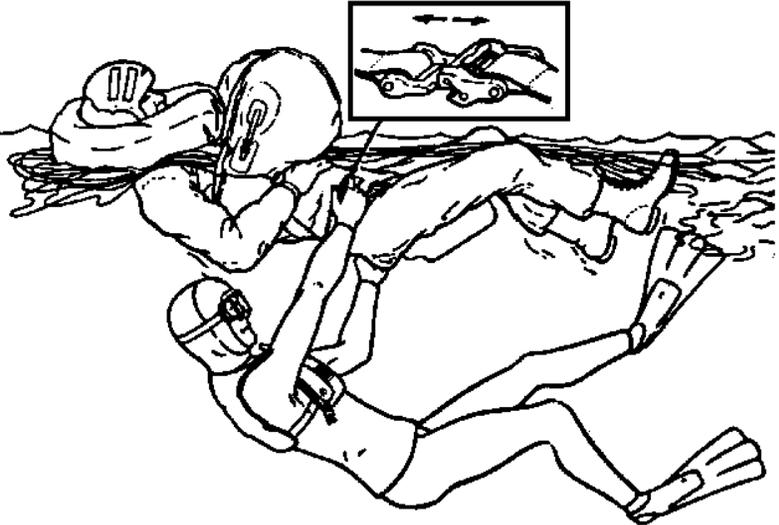
Step	Action
1	<div data-bbox="625 785 1365 1052" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>WARNING</p> <p>Removal of the survivor's harness may increase the risk of drowning because the flotation device would have to be removed first.</p> </div> <p>Approach survivor and establish communications to determine the condition of the survivor. Using rear surface approach, grasp survivor's harness between the shoulder blades and pull into the wind and away from the parachute canopy.</p>
2	<p>Remove oxygen mask. Clear survivor's head, neck, and chest area of suspension lines. Inflate survivor's flotation device if required.</p> <div data-bbox="695 1396 1317 1797" style="text-align: center;"> <p>RESCUE SWIMMER'S HAND SURVIVOR</p> <p>OXYGEN MASK</p> <p>INFLATED LPA-1/1A LIFE PRESERVER</p> </div>

Continued next page

Section E. Parachute Disentanglement (Continued)

E.2 Integrated Torso Harness (Continued)

The following is the continuation of the integrated torso harness parachute disentanglement procedures.

Step	Action
3	<p>Remove shoulder Koch fittings.</p> 
4	<p>Using spinal cord of the survivor as a reference, submerge and proceed hand over hand, always keeping one hand on the survivor, and remove suspension lines.</p>
5	<p>Release oxygen hose and mini-Koch fittings attached to the rigid seat survival kit (RSSK).</p> 

Continued next page

Section E. Parachute Disentanglement (Continued)

E.2 Integrated Torso Harness (Continued)

The following is the continuation of the integrated torso harness parachute disentanglement procedures.

Step	Action
6	Submerge as many times as required to remove all suspension lines.
7	<p>Continue pulling survivor into the wind. If survivor is still not free of the parachute, use the washboard method as follows:</p> <div data-bbox="737 642 1256 869" style="border: 1px solid black; background-color: #e0e0e0; padding: 10px; text-align: center;"><p>WARNING</p><p>Do not use the washboard method if survivor has back injury.</p></div> <p>a. With both hands hold survivor by the back of flotation device.</p> <p>b. In quick succession, push and pull survivor fore and aft. Make sure that survivor's head is kept above water.</p>
8	Submerge and perform a final check to ensure that all suspension lines are free and the parachute is clear.
9	If the survivor has a life raft, puncture and discard the life raft then move away from it.
10	Ensure the area is clear of surface debris; then connect the snap hook of the RS harness to the survivor's gated "D" ring.
11	Signal the helicopter, "Ready For Pickup" (RS Hand Signals Annex B).

Continued next page

Section E. Parachute Disentanglement (Continued)

E.3 Other Types of Harnesses

WARNING

Survivor may be wearing a flotation device; therefore, RS shall disconnect the chest quick ejector snaps before inflating the device. Inflating the device before disconnecting chest ejector snap could crush survivor's chest or restrict breathing.

There are many types of harnesses an RS may encounter. With exception of different types of fittings, inflation of the flotation device, or removal of the parachute harness, the basic disentanglement procedures are the same as section D.7 of this chapter.

NOTE

Some military harnesses do not have a lifting "V" or gated "D" ring for hoisting. The pilot must be hoisted with the sling (with safety straps fastened), basket or litter.

E.4 Chest Pack (US Navy)

The following are procedures for removing a parachute harness with a Navy chest pack installed.

Step	Action
1	Disconnect one spring snap on chest pack to give access to chest quick ejector snap.
2	Disconnect chest quick ejector snap and clear chest area.
3	Inflate flotation device.
4	Disconnect spring snaps to separate parachute.
5	Remove entire harness.

Continued next page

Section E. Parachute Disentanglement (Continued)

E.5 Backpack (US Navy)

The following are procedures for removing a parachute harness with a Navy backpack installed.

Step	Action
1	Disconnect quick ejector snap and clear chest area.
2	Inflate flotation device.
3	Remove shoulder straps.
4	Release leg quick ejector snaps.

E.6 Backpack (US Air Force)

The following are procedures for removing a parachute harness with an Air Force backpack installed. (Currently the J-1 fitting is being phased out on an iteration bases.)

Step	Action
1	Remove J-1 fitting and close safety cover (section D.7 of this chapter).
2	Do not remove harness.
3	Disentanglement procedures are the same as for the USN integrated torso harness (section E.2 of this chapter).

E.7 Ballooned Canopy Disentanglement

The following are procedures for disentangling a survivor from under a ballooned canopy.

WARNING

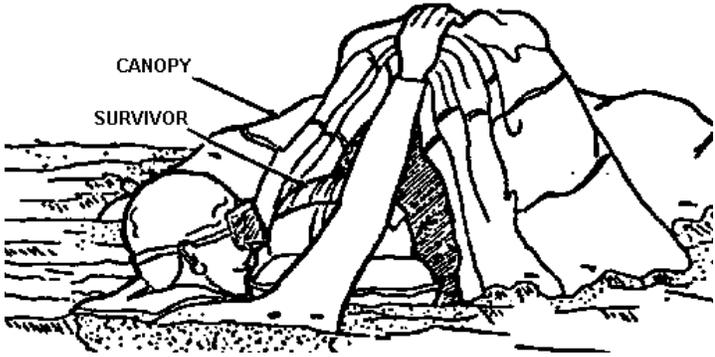
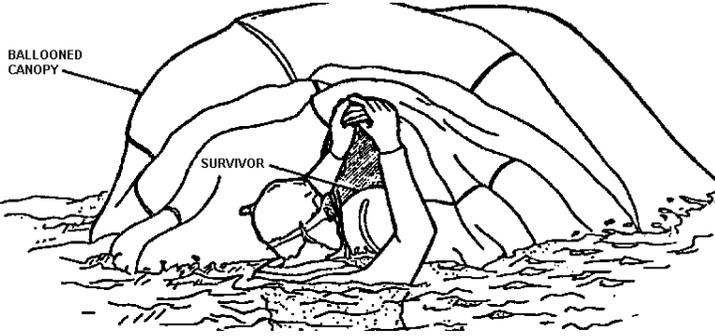
RS must not go under parachute canopy.
Both RS and survivor can be trapped should
the canopy collapse and sink.

Continued next page

Section E. Parachute Disentanglement (Continued)

E.7 Ballooned Canopy Disentanglement (Continued)

The following is the continuation of the procedures for disentangling a survivor from under a ballooned canopy.

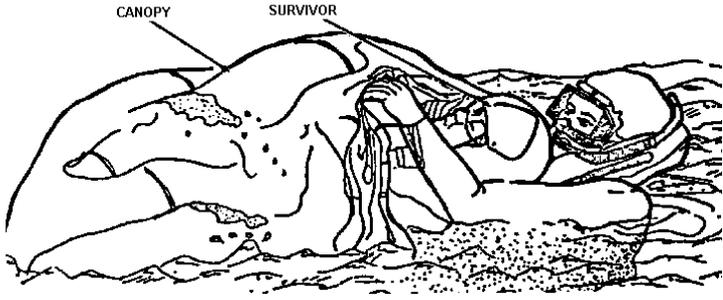
Step	Action
1	While approaching the canopy, establish communications with survivor.
2	Utilize a surface approach, circle the canopy, and locate survivor. Execute a reverse at the edge nearest the survivor.
3	With one arm, lift skirt hem of the parachute.  <p>The illustration shows a rescuer on the ground, leaning over a survivor who is lying on their back. The rescuer is using their right arm to lift the hem of the parachute's skirt. Labels 'CANOPY' and 'SURVIVOR' are present in the drawing.</p>
4	The arm should be used as a hook, gathering the canopy into the hand.  <p>The illustration shows the rescuer's right arm hooked under the edge of the parachute's skirt, pulling it towards the rescuer's hand. The canopy is now partially gathered. Labels 'BALLOONED CANOPY' and 'SURVIVOR' are present in the drawing.</p>
5	With the free arm, turn survivor around, if required, and place firm grip on back of survivor's harness.

Continued next page

Section E. Parachute Disentanglement (Continued)

E.7 Ballooned Canopy Disentanglement (Continued)

The following is the continuation of the procedures for disentangling a survivor from under a ballooned canopy.

Step	Action
6	<p>In one motion, pull survivor back and push parachute over survivor's head.</p>  <p>The diagram shows a top-down view of a survivor lying on the ground. A large, inflated parachute canopy is draped over the survivor. The survivor is reaching up to pull the canopy over their head. Two labels with arrows point to the 'CANOPY' and the 'SURVIVOR'.</p>
7	<p>With survivor out from under the parachute, pull survivor into the wind and away from parachute canopy.</p>
8	<p>When well clear of parachute canopy, use disentanglement procedures applicable to the type of harness the survivor is wearing.</p>

Section F. Survivors Without Flotation Procedures

F.1 Single Survivor The following are procedures for recovering a single survivor without flotation.

WARNING

If the survivor appears to be unconscious or otherwise incapacitated, the RS must take immediate action to gain control of the survivor and keep the survivor's airway clear.

NOTE

The rescue basket is the preferred hoisting/rescue device.

Step	Action
1	Upon reaching an arm's length distance from the survivor, execute a quick reverse and establish communications.
2	Gain control of the survivor using the appropriate approach and carry.

F.2 Multiple Survivors

The following are procedures for recovering multiple survivors without flotation.

NOTE

The rescue basket is the preferred hoisting/rescue device.

Step	Action
1	Upon arrival on scene, the crew may deploy uninflated raft(s) or inflated life vests from the helicopter to the survivors before the RS enters the water.
2	The most severely injured or hypothermic survivor should be rescued first.

Continued next page

Section F. Survivors Without Flotation Procedures (Continued)

F.2 Multiple Survivors (Continued)

The following is the continuation of the procedures for multiple survivor recovery.

Step	Action
3	Rescue survivors furthest from raft or having least amount of flotation.
4	Extract one survivor at a time from the raft. Help survivors swim far enough away from the raft so that the rotor wash does not affect the remaining survivors in the raft.
5	Signal the helicopter, "Ready For Pickup" (RS Hand Signals Annex B).

Section G. Recovery Procedures

G.1 Rescue Basket Recovery The following are rescue basket recovery procedures.

CAUTION

When attaching or removing the M/J rescue basket from the hoist hook, place a hand under both bails to prevent them from falling on the individual in the rescue basket.

NOTE

The Rescue basket is the preferred method of recovery for survivors without spinal injuries.

Step	Action
1	After the RS signals the helicopter "Ready For Pickup" (RS Hand Signals Annex B), keep the survivor's airway clear, and keep the survivor's back into the prevailing seas/wind.
2	Await delivery of the basket to the RS.
3	When the basket has been placed in the water, within 5 to 10 feet of the RS, swim the survivor to the basket.
4	Place the survivor inside the basket in the sitting position.
5	Insure arms and legs of survivor are completely inside the basket.
6	Signal the aircraft "Ready To Be Hoisted" (RS Hand Signals Annex B).
7	The RS should stabilize the basket while the helicopter becomes "plumb" over the basket, just before hoisting.
8	Once device leaves the water, RS back flutter kicks out to the helicopter's 1 to 2 O'clock position, maintaining eye contact with hoisting device.

Continued next page

Section G. Recovery Procedures (Continued)

G.2 Folding Rescue Litter Recovery The following are folding rescue litter recovery procedures.

CAUTION

The medevac board that may be used in the rescue litter has no flotation capability and is not attached to the litter. Therefore, to prevent the loss of the medevac board, do not use it when strapping a person into the litter while they are still in the water.

Step	Action
1	The RS shall give the hand signal (RS Hand Signals Annex B) when it is determined that the litter is needed.
2	The helicopter shall deliver the litter via hoist within 5 to 10 feet of the RS.
3	When the litter is in the water, the RS shall disconnect the litter from the rescue hook and place the hoisting sling cables to the outside of the litter. NOTE The litter hoisting cables must be kept from interfering with the patient restraint straps, as they could become fouled under the survivor.
4	The helicopter shall move left and back once the litter is disconnected.
5	The RS shall guide the survivor into the positioned litter by using the collar tow or equipment carry.
6	<div style="border: 1px solid black; padding: 10px; text-align: center;">WARNING Survivors wearing a buoyant anti-exposure suit will affect the flotation characteristics of the litter.</div> Once the survivor is positioned, the RS shall secure the top two restraint straps around the survivor's chest.

Continued next page

Section G. Recovery Procedures (Continued)

G.2 Folding Rescue Litter Recovery (Continued)

The following is the continuation of the folding rescue litter recovery procedures.

Step	Action
7	<p>Working from the head down, the RS shall secure the rest of the restraint straps using the same procedure.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">When securing the chest pads, the survivor's arms are secured under the chest pad strap. The RS may encounter some difficulty if survivor has flotation; however, survivor flotation shall not be removed.</p>
8	<p>The RS shall ready the litter hoisting sling cables and signal the aircraft "Ready For Pickup".</p>
9	<p>The helicopter will move in, over the RS/Survivor position and lower the rescue hook.</p> <div style="border: 1px solid black; background-color: #e0e0e0; padding: 10px; text-align: center; margin: 10px auto; width: 80%;"> <p>WARNING</p> <p>To prevent shock, allow hook to contact water prior to being touched.</p> </div> <p>The RS shall attach both sides of the litter hoisting sling cables to the large hook.</p>
10	<p>When ready, the RS signals "Thumbs Up" to begin hoisting.</p>
11	<p>Once the device leaves the water, RS back flutter kicks out to the helicopter's 1 to 2 O'clock position, maintaining eye contact with hoisting device.</p>

Continued next page

Section G. Recovery Procedures (Continued)

G.3 RS Harness Emergency Recovery

The following are procedures for RS emergency recovery, using the RS harness.

Step	Action
1	The RS shall connect the bare rescue hook directly to the RS harness lifting "V" ring.
2	Signal the aircraft, "Ready To Be Hoisted" (RS Hand Signals Annex B).
3	With the assistance of the Flight Mechanic, the RS shall enter the cabin backwards.

G.4 Survivors Strop/Harness Recovery of RS

The following are procedures for RS recovery from a vessel, land, or water, using the survivor strop/harness.

WARNING

The RS shall ensure they are well inside the helicopter before detaching themselves from the hoist hook or strop.

Step	Action
1	<p>The RS and helicopter crew may pre-brief this type maneuver before the RS exits the aircraft or the RS may signal the aircraft to "Deploy Survivors Strop" (RS Hand Signals Annex B).</p> <p style="text-align: center;">NOTE</p> <p>The survivors strop may be omitted only if its use may hinder the delivery of the rescue hook; i.e. strop swinging in rotorwash during delivery of hook to confined areas on land or vessels.</p>

Continued next page

Section G. Recovery Procedures (Continued)

G.4 Survivors Strop/Harness Recovery of RS (Continued)

The following is the continuation of procedures for RS recovery from a vessel, land, or water, using the survivor strop/harness.

Step	Action
2	When the RS signals "Ready For Pickup" (RS Hand Signals Annex B), the helicopter shall lower the rescue hook with a survivors strop attached at one end to provide visibility and flotation.
3	The RS shall either connect the hoist hook to RS harness, or position strop around their body and connect loose end of survivor strop to hoist hook.
4	Signal the aircraft, "Ready To Be Hoisted" (RS Hand Signals Annex B).

G.5 RS Harness, Military Aviator Double Pick-Up

The following are procedures for the Military Aviator Double Pick-Up (MADPU) recovery, using the RS harness.

Step	Action
1	The RS and helicopter crew shall pre-brief this type maneuver before the RS exits the aircraft.
2	Approach the survivor from the rear and pull the lifting strap from the pocket of the RS harness.
3	Connect the RS harness snap hook to the survivors lifting device.

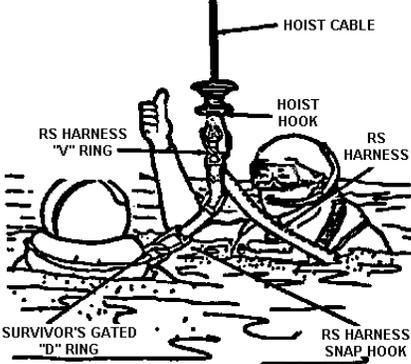
The diagram shows a rescuer (RS) and a survivor in a body of water. The rescuer is wearing a harness and is reaching out to connect a snap hook to the survivor's lifting device. Labels with arrows point to the 'RS HARNESS' on the rescuer, the 'RS HARNESS SNAP HOOK' being held by the rescuer, and the 'CREWMAN'S GATED "D" RING' on the survivor's equipment.

Continued next page

Section G. Recovery Procedures (Continued)

G.5 RS Harness, Military Aviator Double Pick-Up (Continued)

The following is the continuation of procedures for the Military Aviator Double Pick-Up (MADPU) recovery, using the R/S harness.

Step	Action
3 (Continued)	<p style="text-align: center;">NOTE</p> <p style="text-align: center;">During training with 2 RS's, the RS will connect the snap hook to the survivor RS's lifting "V" ring.</p>
4	<p>When the RS signals "Ready For Pickup". The helicopter shall lower the rescue hook with a survivor strop attached at one end to provide visibility and flotation.</p>
5	<div style="border: 1px solid black; padding: 10px; text-align: center; margin: 10px auto; width: 80%;"> <p>WARNING</p> <p>If the survivor is wearing the Navy integrated torso harness, use extreme caution to ensure that the gated "D" rings, and RS snap hook are not disconnected before hoisting.</p> </div> <p>When the rescue hook is lowered and in the water, connect the lifting "V" ring of the RS harness to the large rescue hook.</p>
6	<p>Signal the aircraft, "Ready To Be Hoisted" (RS Hand Signals Annex B).</p> <div style="text-align: center;">  </div>

Continued next page

Section G. Recovery Procedures (Continued)

G.5 RS Harness, Military Aviator Double Pick-Up (Continued)

The following is the continuation of procedures for the Military Aviator Double Pick-Up (MADPU) recovery, using the RS harness.

Step	Action
7	Upon clearing the water, the RS arms and legs are placed around the survivor.
8	The RS and survivor shall be hoisted up to the helicopter. The RS shall prevent the survivor's head from contacting the bottom of the helicopter during the hoist.
9	The survivor is brought in the helicopter back first with the RS knees on deck straddling the survivor.
10	<div style="border: 1px solid black; padding: 10px; text-align: center; margin: 10px auto; width: 80%;"> <p>WARNING</p> <p>The RS shall ensure they are well inside the helicopter before detaching themselves from the hoist hook or strop.</p> </div> <p>Once inside the helicopter, the RS shall detach the survivor from the snap hook on the RS harness.</p>

G.6 Strop (Survivors) Augmented Double Pick-Up

The following are procedures for the Strop Augmented Double Pick-Up (SADPU) recovery, using the survivors strop.

NOTE

Before deploying sling to RS, the flight mechanic shall pull free the sling's safety straps and lower the sling to RS with one end attached to the large hoist hook.

Continued next page

Section G. Recovery Procedures (Continued)

G.6 Strop (Survivors) Augmented Double Pick-Up (Continued)

The following is the continuation of procedures for the Strop Augmented Double Pick-Up (SADPU) recovery.

Step	Action
1	Positioned at the survivor's back, the RS will place the sling in front of the survivor. Then pass the free end of the sling under one arm, around the back, and under the other arm.
2	Reconnect the "V" ring to the large rescue hook.
3	Connect safety strap by securing snap hook to the "V" ring across survivor's chest and pulling tight.
4	The survivor's arms shall be crossed across the chest.
5	The RS shall connect the lifting "V" ring of the swimmer's harness to the large rescue hook.
6	Signal the aircraft, "Ready To Be Hoisted" (RS Hand Signals Annex B).
7	Upon clearing the water the arms and legs of the RS are placed around the survivor.
8	The RS and survivor shall be hoisted up to the helicopter. The RS shall prevent the survivor's head from contacting the bottom of the helicopter during the hoist.
9	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>WARNING</p> <p>The RS shall ensure the survivor is well inside the helicopter sitting or supine on the deck before detaching the survivor and him/herself from the hoist hook.</p> </div> <p>The survivor is brought in the helicopter back first with the knees of the RS on the deck straddling the survivor.</p>

Section H. Aircraft Radio Vectoring

H.1 Aircraft Radio Vectoring Introduction

These procedures shall be used by the RS when radio vectoring any aircraft during RS relocation. The effectiveness of radio vectoring operations depends upon the ability of the RS to communicate accurate guidance to the aircraft pilot. Standard voice procedures reduce the chance of misunderstanding.

H.2 Radio Vectoring Commands

The table below provides radio-vectoring commands and they're meaning.

Command	Meaning
COMMENCE RIGHT TURN	Start turn to the Right
COMMENCE LEFT TURN	Start turn to the Left
STOP TURN	Stop turning(aircraft wings level, maintain heading)

H.3 Radio Vectoring Advisory Reports

The table below provides radio vectoring advisory reports and they're meaning.

Advisory	Meaning
CONTINUE __ TURN	Continue turning "Right" or "Left"
I AM AT YOUR __ O'CLOCK, APPROX. __ MILE(S)	The swimmer's present position and distance relative to the aircraft.
MARK, MARK, MARK	Aircraft position is directly overhead of Rescue Swimmer. Mark position.

Continued next page

Section H. Aircraft Radio Vectoring (Continued)

H.4 Aircraft Radio Vectoring Procedure Notes

The following is a list of procedure notes concerning aircraft radio vectoring.

- (1) Local CG working frequency is used for all CG Rescue Swimmer radio operations. During actual SAR situations, the Rescue Swimmer may use VHF CH 16 in order to call in other assets that may be responding.
 - (2) Ensure that the radio's antenna is not touching the water and pointed straight up; not at the aircraft.
 - (3) Before attempting to transmit or receive, check that the radio speakers have no water in them. To clear speakers blow forcefully into them; this forces the water out of the speaker diaphragm.
 - (4) When radio vectoring always have the aircraft turn toward your position. If the aircraft is moving from right to left of your position, have the aircraft turn left. For an aircraft moving left to right of your position, have the aircraft turn right.
 - (5) Most aircraft do not respond instantly to control inputs from the pilots. When you radio "COMMENCE RIGHT TURN," it may be a few seconds before the aircraft starts turning. This delay is the pilot reacting to the command, and the aircraft reacting to the control input. A delay will also occur after the "STOP TURN" command. The goal of radio vectoring is to vector an aircraft to your position with the aircraft turning the least number of turns as possible.
 - (6) The importance of having the rescue swimmer keep talking after establishing radio contact with an aircraft cannot be overstressed. Between vectoring commands and advisories, the rescue swimmer may begin telling the aircraft his/her condition and equipment or signals that are available. Inform the pilot of the surface winds relative to the aircraft's position and heading if possible.
-

Chapter 3 Rescue Swimmer Training Requirements Table of Contents

SECTION A. TRAINING REQUIREMENTS INTRODUCTION

A.1 Introduction.....	3-2
A.2 Shallow Water Blackout	3-2

SECTION B. TRAINING REQUIREMENTS

B.1 Operational Training Requirements	3-3
B.2 Frequency of Required Training Elements	3-3
B.3 RS Training Elements	3-4
B.3.a Physical Training Screen Exam.....	3-4
B.3.a Physical Training Screen Exam.....	3-5
B.3.b PT Workout	3-6
B.3.c SwimWorkout	3-8
B.3.c Swim Workout	3-9
B.4 Rescue Equipment and Lifesaving Drills	3-9
B.5 Litter Recovery, Parachute and Harness Disentanglement	3-10
B.6 EMT Classroom Training.....	3-10
B.7 EMT Practical Training.....	3-11
B.8 EMT Recertification.....	3-12
B.9 Aircraft Vectoring	3-12
B.10 Helicopter RS Operations	3-13
B.11 PT Screening Requirements for Non-Operational RS	3-13
B.12 Training Records	3-14

Section A. Training Requirements Introduction

A.1 Introduction

This chapter establishes minimum training requirements for Coast Guard Helicopter Rescue Swimmers. These elements of training assure that the operational RS maintains the skills to function as a helicopter crewmember and EMT, and the flexibility, strength, and endurance to assist persons in heavy seas. They also assure that the AST (E-6 and below) that is non-operational maintains a minimum level of fitness that will permit a quick return to the operational level of fitness.

A.2 Shallow-Water Blackout

WARNING

Do not hyperventilate prior to underwater swims. Hyperventilation can lead to shallow-water blackout.

During RS training short distant underwater swimming is required. A long breath-holding ability is not needed to complete this training. The following is a simple explanation of shallow-water blackout.

- (1) Hyperventilation (excessively rapid breathing) purges the blood of C_0^2 , the body's cue to breathe.
- (2) The swimmer runs out of oxygen without ever feeling the need to breathe, passes out, and drowns.

Section B. Training Requirements

B.1 Operational Training Requirements

- (1) Training requirements as listed in this Manual provide RS with adequate time each week and broad guideline's to maintain their physical fitness. An RS will be tested, in the form of the Monthly Physical Training Screen Exam, to ensure they are maintaining the minimum standard of physical fitness. It is the responsibility of the RS to maintain the appropriate level of physical fitness.
- (2) Any AST whose operational training requirements are not met is not permitted to function as a helicopter rescue swimmer and may forfeit SDAP. An AST that has not maintained his/her physical fitness due to leave, TAD, Night Check, medical grounding, etc. for 30 days or more must pass the monthly screen exam prior to performing the duties of an operational RS.
- (3) When a swimming pool is temporarily unavailable or an RS is deployed with a helicopter away from their home station, the swim workout is waived. In lieu of this, the RS must complete the PT workout 3 times in a 7-day period.

B.2 Frequency of Required Training Elements

The following table provides the frequency of required training elements.

Training	Frequency
PT Screen Exam	1 time a calendar month
PT workout	2 times a 7-day period
Swimming workout	1 time a calendar week
Rescue equipment/lifesaving drills	1 time a calendar month
Litter drills	1 time each 6 months
Harness/parachute disentanglement	1 time each 6 months
EMT recurrent classroom training	3 hours per quarter
EMT recurrent practical training	3 hours per quarter
EMT recertification	Every 24 months
Aircraft Vectoring	1 time each 6 months

Continued next page

Section B. Training Requirements (Continued)

B.2 Frequency of Required Training Elements (Continued)

The following is the continuation of the frequency of required training elements.

Training	Frequency
Standardization Check	See Chapter 4, COMDTINST 3710.1, Air Operations Manual
Bloodborne Pathogens	1 time a calendar year
Helo RS Ops (deployments)	6 per quarter (2DD, 2FF, 2 sling/harness)

B.3 RS Training Elements

The PT and swimming workouts are designed to maintain the flexibility, strength, and endurance an RS needs to function for 30 minutes while assisting persons in heavy seas. The levels of stress in these workouts allow the operational RS to complete the workout and retain sufficient strength and endurance to stand duty and perform a rescue.

B.3.a Physical Training Screen Exam

NOTE

Exercise descriptions are in Annex D.

- (1) **Warm-Up:** 3-minute fast walk, light jog, jog in place, or flutter kick.

NOTE

The intention of the warm-up is to increase the heart rate and warm up the muscles to prepare for the stretches, upper body workout, and cardiovascular conditioning. Performing the warm-up in cold temperatures without cold weather PT clothing may not allow the muscles to warm properly.

Continued next page

Section B. Training Requirements (Continued)

B.3.a Physical Training Screen Exam

(2) Pre-Exercise Stretches:

Stretches	Duration/Direction
Neck Flexion	15 Secs. each direction
Shoulder Rotations	5 each direction
Swimmer Stretch	15 Secs.
Deltoid Stretch	15 Secs. Left/Right
Tricep Stretch	15 Secs. Left/Right
Sitting Body Twist	15 Secs. Left/Right
Calf Stretch	15 Secs. Left/Right
Inside Hurdlers Stretch	15 Secs. Left/Right
Groin Stretch (Butterfly)	15 Secs.
Lower Back Stretch	15 Secs. Left/Right

(3) Screen Exam Standards:

Exercise	Minimum Standard
Shoulder Width Pushups	50
Sit-ups	60
Pull-ups	5
Chin-ups	5
500 Yard Crawl Swim	Completed within 12 Minutes
25 Yard Underwater Swim	Repeat 4 Times
Buddy Tow	200 Yds. (RS shall use cross chest carry or equipment tow.)

Continued next page

Section B. Training Requirements (Continued)

B.3.a Physical Training Screen Exam (Continued)

- (4) The Monthly Physical Training Screen Exam shall be administered by the AST shop supervisor or an RS Flight Examining Board member to ensure a RS is maintaining their physical fitness.
- (5) An RS who do not pass the monthly screen exam or any part of the screen exam shall not perform the duties of an operational RS until he/she is capable of passing the entire screen exam.
- (6) All exercises shall be completed in strict adherence to proper form (IAW Annex D).
- (7) RS shall complete the 200-yard buddy tow.
- (8) RS shall complete the four 25 yard underwater swims consecutively, with a maximum of 60 seconds rest between swims.

B.3.b PT Workout

WARNING

RS shall not exercise to muscle failure on
RS duty days.

The PT Workout is designed to be completed within a 60-minute period. Commands shall provide sufficient time for RS to complete the PT Workout three times per week. Two periods per week shall include the 3-minute warm-up, pre-exercise stretches, 20 minutes of cardiovascular training at training heart rate, 3 minutes of cool down and post exercise stretches. One period per week shall be the swim workout.

- (1) **Warm-Up:** 3-minute fast walk, light jog, jog in place, or flutter kick.

NOTE

The intention of the warm-up is to increase the heart rate and warm up the muscles to prepare for the stretches, upper body workout, and cardiovascular conditioning. Performing the warm-up in cold temperatures without cold weather PT clothing may not allow the muscles to warm properly.

Continued next page

Section B. Training Requirements (Continued)

B.3.b PT Workout (Continued)

(2) Pre Exercise Stretches:

Stretches	Duration/Direction
Neck Flexion	15 Secs. each direction
Shoulder Rotations	5 each direction
Swimmer Stretch	15 Secs.
Deltoid Stretch	15 Secs. Left/Right
Tricep Stretch	15 Secs. Left/Right
Sitting Body Twist	15 Secs. Left/Right
Calf Stretch	15 Secs. Left/Right
Inside Hurdlers Stretch	15 Secs. Left/Right
Groin Stretch (Butterfly)	15 Secs.
Lower Back Stretch	15 Secs. Left/Right

(3) **Cardiovascular Conditioning:** (20 minutes minimum)
Maintain Training Heart Rate (Annex C) to achieve training effect. Swimming is preferred, if facilities and time are available. Examples of non-swim alternatives are: running, cycling, stationary cycling machine, cross-country ski machine, or stair step machine

(4) **Cool Down:** Perform a 3-minute cool-down walk to transition to the Post-exercise stretches.

(5) Post-Exercise Stretches:

Stretches	Duration/Direction
Tricep	15 Secs. Left/Right
Sitting Toe Touch	15 Secs.
Groin Stretch (Butterfly)	15 Secs.

Continued next page

Section B. Training Requirements (Continued)

B.3.c Swim Workout

WARNING

RS shall not exercise to muscle failure on RS duty days.

One period per week shall be the swim workout.

(1) **Pre Swim Stretches:**

Stretches	Duration/Direction
Neck Flexion	15 Secs. each direction
Shoulder Rotations	5 each direction
Swimmer Stretch	15 Secs.
Deltoid Stretch	15 Secs. Left/Right
Tricep Stretch	15 Secs. Left/Right
Sitting Body Twist	15 Secs. Left/Right
Calf Stretch	15 Secs. Left/Right
Inside Hurdlers Stretch	15 Secs. Left/Right
Groin Stretch (Butterfly)	15 Secs.
Lower Back Stretch	15 Secs. Left/Right

WARNING

Do not hyperventilate prior to underwater swims.
Hyperventilation can lead to shallow-water blackout.

(2) **Swim Standards:** With Swim Suits Only (Goggles optional):

* Maintain Training Heart Rate to achieve training effect (Annex C).

Continued next page

Section B. Training Requirements (Continued)

B.3.c Swim Work-out (Continued)

The following is the continuation of the swim workout.

Exercises	Duration/Direction
With Swim Suits Only (Goggles optional): Crawl Stroke	12:00 Minutes (500 Yds. Min)
With Gear (Mask, Fins, Snorkel) Swim (Flutter Kick, Any Stroke)	15:00 Minutes*
Buddy Tow	200 Yards
25 Yd. Underwater Swim	Repeat 4 Times

- (3) RS shall complete the 12-minute crawl stroke swim and 15 minute gear swim consecutively, changing into RS gear, as listed, in 5 minutes or less.
 - (4) RS shall complete the four 25 yard underwater swims consecutively with a maximum of 60 seconds rest between swims.
 - (5) RS shall complete a 200-yard Buddy tow.
-

B.4 Rescue Equipment and Lifesaving Drills

The following rescue equipment and lifesaving drills shall be completed a minimum of one time during each calendar month (pool or sheltered water).

NOTE

Operational deployments can be used to fulfill this requirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency.

- Front surface approach
 - Rear surface approach
 - Underwater approach
 - Rear head-hold release
 - Rear head-hold escape
 - Front head-hold release
 - Front head-hold escape
 - Spinal highway
-

Continued next page

Section B. Training Requirements (Continued)

B.5 Litter Recovery, Parachute and Harness Disentanglement

The following litter recovery, parachute and harness disentanglement drills shall be completed a minimum of one time during each six month period. They shall be completed in appropriate ensemble for area of operations.

WARNING

Parachute and harness disentanglement drills shall be completed in a pool environment only.

NOTE

Operational deployments can be used to fulfill this requirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency.

- (1) Perform one in water litter recovery.
- (2) Perform one complete disentanglement of an individual in a current type of USN or USAF parachute harness.
- (3) Perform a canopy release/harness removal on each of the remaining current types of USN or USAF parachute harnesses.

B.6 EMT Classroom Training

The following table is a schedule of EMT classroom subjects that shall be completed a minimum of three hours per quarter (i.e. one hour per month).

Month	Subject
January	Respiratory & cardiac problems
February	Skull & spine injuries
March	Emergency childbirth
April	Diving & near drowning injuries
May	Sunstroke, heat exhaustion & heat cramps

Continued next page

Section B. Training Requirements (Continued)

B.6 EMT Classroom Training (Continued)

The following is the continuation of the EMT classroom subjects training schedule.

Month	Subject
June	Burns & soft tissue injuries
July	Triage & psychological aspects of EMS
August	Fracture, dislocation & abdominal problems
September	Hypothermia & other cold injuries
October	Anatomy & physiology/Blood Pathogens
November	Patient examination & vital signs
December	Diabetic emergency, shock/stroke/seizures

B.7 EMT Practical Training

The following table is a schedule of EMT practical subjects that shall be completed a minimum of three hours per quarter (i.e. one hour per month).

NOTE

Operational deployments (EMT skills performed) can be used to fulfill this requirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency.

Month	Subject
January	CPR & oxygen equipment review
February	Skull & spine injury management
March	Emergency Childbirth
April	Diving injury management & CPR review
May	Heat injury management, EMT equipment inspection & maintenance

Continued next page

Section B. Training Requirements (Continued)

B.7 EMT Practical Training (Continued)

The following is the continuation of the EMT practical subjects training schedule.

Month	Subject
June	Burns & soft tissue injury management
July	CPR & oxygen equipment review
August	Fracture & dislocation management
September	Hypothermia & cold injury management EMT equipment inspection & maintenance
October	CPR & oxygen equipment review
November	Patient examination & vital signs
December	Diabetic emergency, shock, stroke & seizure management

B.8 EMT Recertification

(Ref. Emergency Medical Services Manual, COMDTINST M16135.4 series)

All CG EMTs must attend and complete a recertification course prior to the expiration of their current certification. The National Registry recertification course at the CG EMT School is preferred, but any DOT nationally registered course will fulfill the requirement. The EMT National Registry Board will send a standard form to the EMT to document completed training requirements. This form must be completed and returned as well as completion of recertification course to remain nationally certified. Recurrent EMT training shall be documented IAW Emergency Medical Services Manual, COMDTINST M16135.4 on CG-5550.

B.9 Aircraft Vectoring

Conduct a radio vectoring exercise with a Rotary Wing or Fixed Wing aircraft.

NOTE

Operational deployments requiring aircraft vectoring can be used to fulfill this requirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency.

Continued next page

Section B. Training Requirements (Continued)

B.10 Helicopter RS Operations

Deploy from a Helo freefall, direct, sling or harness to water, ice, vessel or vertical surface and recover. Six deployments per quarter (2 direct, 2 sling, 2 freefall). RS shall employ crotch strap during 1 direct deployment recovery using rescue mannequin or qualified training survivor.

NOTE

Operational deployments can be used to fulfill this requirement. If minimums are not met, the RS may not deploy operationally until he/she regains currency.

NOTE

Units are authorized to count RS sling or harness deployments to any suitable land area towards minimums upon the unit commanding officer's determination that conditions beyond the unit's control reasonably preclude a water or vertical surface deployment during the period. These events will count for minimums for Rescue Swimmers, Pilots, and Flight Mechanics. While weather is a primary consideration, other factors such as absence of a safety boat or safety aircraft due to extreme operational tasking may also preclude water deployments for training. As this determination must be made at the end of the period in question, it is imperative that swimmers make use of every opportunity during the quarterly period to conduct their deployments.

B.11 PT Screening Requirements for Non-Operational RS

The following is the quarterly PT screening requirements for all non-operational RS AST's, E-6 and below, regardless of their assignment.

Exercise	Minimum Standard
Pushups	50
Sit-ups	60
Pull-ups	5
Chin-ups	5
Swim 500 Yd., Any Stroke	12:00 Minutes Max

Continued next page

Section B. Training Requirements (Continued)

B.12 Training Records

The Helicopter Rescue Swimmer Training Record and Physical Training Screen Exam must be completed and maintained by the RS unit for a minimum of 18 months.

Annex A Standard Rescue Swimmer Deployment Message Format

STANDARD USCG HELICOPTER RESCUE SWIMMER DEPLOYMENT MESSAGE FORMAT

FM COGARD AIRSTA
TO AIG FOUR NINE ZERO THREE
BT
UNCLAS FOUO//N01330//
SUBJ: RESCUE SWIMMER SAR DEPLOYMENT

A. COAST GUARD HELICOPTER RESCUE SWIMMER MANUAL, COMDTINST
M3710.4

1. Date and Local Time of Deployment (30 JUN 94, 1225Q)
2. Location of Deployment (25nm E Boston MA, 00-00N 00-00W)
3. Aircraft Type and Number (HH-65A, CGNR 6570)
4. Weather - Best estimate of weather at time and place of deployment (sky conditions, visibility, sea state, air temperature, water temperature)
5. DEPLOYMENT DATA
 - a. Deployment/Recovery Method(s) Used
 - b. Equipment problems encountered.
 - c. Mishap to Rescue Swimmer, if any.
6. SURVIVOR DATA
 - a. Number of survivors
 - b. Survivor Information: Gender, Age(s) if known
 - c. Situation of Survivors on Arrival (in raft, swimming etc.)
 - d. Physical Condition upon Recovery
 - e. EMT Treatment Provided
7. Narrative Description of Rescue - Brevity is desired but provide a clear picture of what happened.
8. Additional information, Comments or Recommendations.
9. Name, Rank, Phone Number of Point of Contact - (F.A. Erickson, LCDR, FTS 555-1212)

Annex A Standard Rescue Swimmer Deployment Message Format (Continued)

USCG HELICOPTER RESCUE SWIMMER SAR DEPLOYMENT MESSAGE

SAMPLE MESSAGE

FM COGARD AIRSTA KODIAK AK

TO AIG FOUR NINE ZERO THREE

BT

UNCLAS FOUO//N01330//

SUBJ: RESCUE SWIMMER SAR DEPLOYMENT

A. COAST GUARD HELICOPTER RESCUE SWIMMER MANUAL, COMDTINST M3710.4

1. 30 JUN 94, 1225Q

2. 185NM EAST OF KODIAK AK 570-40N 146-36W

3. HH-60J, CGNR 6012

4. 2 OVC, VIS 1-2NM, WIND 170/30KTS, SEAS 10FT, OAT 50F, (EST) SWT 40F.

5. DEPLOYMENT DATA:

A. SLING DEPLOYMENT, 5 BASKET RECOVERIES, BARE HOOK OF RESCUE SWIMMER

B. DRY SUIT LEAKED IN THE FEET

C. RS STRUCK ON FACE BY DEBRIS; 1" LACERATION ON CHEEK; TREATED UPON RTB.

6. SURVIVOR DATA:

A. 5

B. 1-25M, 2-26M, 3-22F, 4-35F, 5-40M

C. ALL 5 PERSONS IN RAFT WITH CANOPY, MANUFACTURER AND MODEL UNKNOWN. 4 OF THE FIVE SURVIVORS WERE IN SURVIVAL SUITS, OTHER SURVIVOR IN RAIN SUIT.

D. SURVIVORS 1 2 3 AND 4 IN GOOD CONDITION, SURVIVOR 5 WAS WET AND SUFFERING FROM HYPOTHERMIA.

E. PLACED SURVIVOR 5 IN T.R.C.

7. A F/V WAS REPORTED TOW AND SINKING 185NM EAST OF KODIAK. 4 OF 5 CREWMEN DONNED SURVIVAL SUITS AND ALL CREWMAN ENTERED RAFT. H-60 LOCATED RAFT AND ELECTED TO DEPLOY SWIMMER TO SPEED RECOVERY AND ELIMINATE NEED TO HOVER OVER RAFT. RS SLING DEPLOYED AND SWAM EACH SURVIVOR AWAY FROM RAFT AND PLACED IN BASKET FOR RECOVERY. WITH ONLY 40 MINUTES OF ON-SCENE FUEL REMAINING, SPEED WAS ESSENTIAL TO RECOVER ALL SURVIVORS IN ONE SORTIE.

8. BECAUSE OF HIGH WINDS AND CONFUSED SEA STATE, RECOMMEND USE OF SMOKES FOR RS DEPLOYMENTS TO KEEP TRACK OF WIND DIRECTION. WITHOUT USE OF RS, RESCUE WOULD HAVE TAKEN TWO SORTIES WHICH WOULD HAVE PUT SURVIVORS IN DANGER.

9. F.A. ERICKSON, LCDR, FTS 555-1212

BT

Annex B USCG Helicopter Rescue Swimmer Hand Signals

A.1 Day Signals

The following are standard RS day hand signals.

Signal	Meaning
 <p data-bbox="862 512 1008 541">Raised Arm</p>	<p data-bbox="1175 512 1321 541">I am all right</p>
 <p data-bbox="862 873 1008 940">Raised arm Thumb up</p>	<p data-bbox="1127 873 1373 903">Move in for pick-up</p>
 <p data-bbox="834 1230 1040 1297">Vigorous waving of one arm</p>	<p data-bbox="1159 1230 1341 1297">In trouble need assistance</p>
 <p data-bbox="821 1587 1049 1654">Clinched fists arms crossed overhead</p>	<p data-bbox="1179 1587 1321 1617">Deploy raft</p>

Continued next page

Annex B USCG Helicopter Rescue Swimmer Hand Signals (Continued)

A.1 Day Signals (Continued)

The following is the continuation of standard RS day hand signals.

Signal	Meaning
 <p data-bbox="857 495 1062 527">Hand held to ear</p>	<p data-bbox="1166 495 1338 527">Monitor radio</p>
 <p data-bbox="854 678 1068 1108">One arm raised and extended vertically with palm open facing forward. The other arm shall be raised so that it crosses the swimmer's head and touches the first arm at the elbow.</p>	<p data-bbox="1138 884 1370 915">Deploy rescue litter</p>
 <p data-bbox="854 1150 1068 1434">Both arms extended over the swimmer's head. Palms open facing forward at a 45° angle to the side of the swimmer's head.</p>	<p data-bbox="1122 1287 1386 1318">Deploy rescue basket</p>

Continued next page

Annex B USCG Helicopter Rescue Swimmer Hand Signals (Continued)

A.1 Day Signals (Continued)

The following is the continuation of standard RS day hand signals.

Signal		Meaning
	<p>Both arms extended over the swimmer's head with fingers interlocked.</p>	<p>Deploy survivors stop</p>

A.2 After Hook-Up to Rescue Hook

The following are after hook-up to rescue hook hand signals.

Signal		Meaning
	<p>Arm raised thumb up</p>	<p>Ready to be hoisted.</p>
	<p>Arm raised, clenched fist</p>	<p>Stop hoisting</p>

Continued next page

Annex B USCG Helicopter Rescue Swimmer Hand Signals (Continued)

A.2 After Hook-Up to Rescue Hook (Continued)

The following is the continuation of after hook-up to rescue hook hand signals.

Signal		Meaning
	<p>Arm raised thumb down</p>	<p>Lower cable</p>

A.3 Night/Low Visibility Hand Signals

The following are night/low visibility hand signals.

Signal		Meaning
	<p>Swimmer's lighting device (Chemlight) on, arm raised.</p>	<p>I am all right.</p>
	<p>Wave signal device</p>	<p>Move in for pick-up (night/low visibility).</p>

Continued next page

Annex B USCG Helicopter Rescue Swimmer Hand Signals (Continued)

A.3 Night/Low Visibility Hand Signals (Continued)

The following is the continuation of night/low visibility hand signals.

Signal	Meaning
 <p data-bbox="883 583 1032 653">Wave signal device</p>	<p data-bbox="1123 583 1382 688">Alternate move in for pick-up (night/low visibility).</p>
 <p data-bbox="896 961 1019 989">Strobe on</p>	<p data-bbox="1094 961 1284 1024">In trouble, need assistance.</p>

A.4 Direct Deployment Hand Signals

The following are direct deployment hand signals.

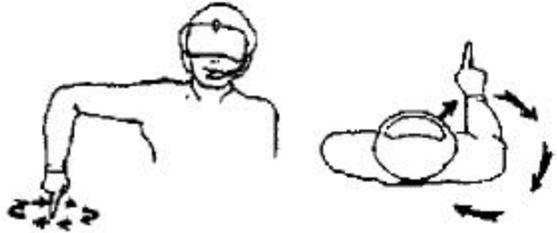
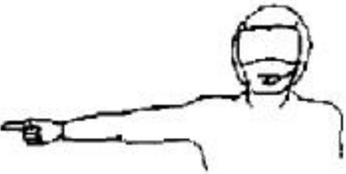
Signal	Meaning
 <p data-bbox="857 1520 1057 1661">Extend arm then bend elbow to touch head with open palm.</p>	<p data-bbox="1230 1520 1273 1547">Up</p>

Continued next page

Annex B USCG Helicopter Rescue Swimmer Hand Signals (Continued)

A.4 Direct Deployment Hand Signals (Continued)

The following is the continuation of direct deployment hand signals.

Signal	Meaning
 <p data-bbox="808 688 1036 722">Flight Mech. View</p> <p data-bbox="516 758 1036 827">With finger pointed down, rotate forearm in horizontal circle.</p>	<p data-bbox="1214 653 1295 686">Down</p>
 <p data-bbox="776 1182 1003 1215">Flight Mech. View</p> <p data-bbox="570 1251 980 1285">Sweep horizontal using entire arm.</p>	<p data-bbox="1198 1003 1312 1037">Level off</p>
 <p data-bbox="894 1360 1036 1499">Point in direction of desired movement</p>	<p data-bbox="1143 1360 1360 1423">Move in direction indicated.</p>

Annex C Rescue Swimmer Training Heart Rate

RESCUE SWIMMER TRAINING HEART RATE

AGE	THR Swim	THR Non- Swim
19	161	171
20	160	170
21	159	169
22	158	168
23	157	167
24	157	167
25	156	166
26	155	165
27	154	164
28	153	163
29	152	162
30	152	162
31	151	161
32	150	160
33	149	159
34	148	158
35	147	157
36	146	156
37	146	156
38	145	155
39	144	154
40	143	153

AGE	THR Swim	THR Non- Swim
41	142	152
42	141	151
43	140	150
44	140	150
45	139	149
46	138	148
47	137	147
48	136	146
49	135	145
50	135	145
51	134	144
52	133	143
53	132	142
54	131	141
55	130	140
56	129	139
57	129	139
58	128	138
59	127	137
60	126	136
61	125	135
62	124	134

Blank Page

Annex D Stretch and Exercise Description

A.1 Stretch Descriptions

The following table provides stretch descriptions with examples.

Description	Example
<p><u>Neck Flexion:</u> While standing, lean head to the right for 15 seconds and then to the left for 15 seconds. Turn head to the right and hold for 15 seconds then to the left.</p>	
<p><u>Shoulder Rotations:</u> While standing, roll shoulders to the rear 5 times then to the front 5 times.</p>	

Continued next page

Annex D Stretch and Exercise Description (Continued)

Description	Example
<p><u>Swimmer Stretch:</u> While standing, place arms behind back and interlace fingers. Bend forward at the waist while raising the arms above the back. Hold for 15 seconds. Release, stand straight.</p>	
<p><u>Deltoid Stretch:</u> While standing, pull arm horizontally across chest using opposite hand placed on the elbow. Hold for 15 seconds. Repeat for other arm.</p>	

Continued next page

Annex D Stretch and Exercise Description (Continued)

Description	Example
<p><u>Tricep Stretch:</u> While standing, place the right hand behind the left shoulder. Grasp the right elbow with the left hand. Pull left and down on the elbow to stretch the tricep muscle. Flex the upper body to the left. Hold for 15 seconds. Repeat for other side.</p>	
<p><u>Sitting Body Twist:</u> While sitting cross the left leg over the right and turn to the left locking your elbow behind the knee. Repeat for the opposite side.</p>	
<p><u>Calf Stretch:</u> Stand three to four feet from a solid support (wall, post) and lean toward it, supporting yourself with your hands and arms extended. Lower yourself towards the support slowly until you feel the calves stretch. Keep the heels flat on the ground. Hold for 15 seconds.</p>	

Continued next page

Annex D Stretch and Exercise Description (Continued)

Description	Example
<p><u>Inside Hurdlers Stretch:</u> While sitting on the floor, the right leg is extended straight out from the body. The left leg is flexed at the knee and the left foot is placed on the inside of the right leg. Bend forward at the waist attempting to touch the forehead to the right knee and extend the hands toward the right foot. Hold for 15 seconds. Repeat on the other side.</p>	
<p><u>Groin Stretch:</u> While sitting on the floor. Both knees are flexed so the soles of the feet are together. The elbows are placed on the knees. The hands are placed on the ankles. The knees are pressed towards the floor. Hold for 15 seconds.</p>	 <div data-bbox="862 1556 1247 1812" style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Do not grasp the feet or rotate them while doing this stretch.</p> </div>

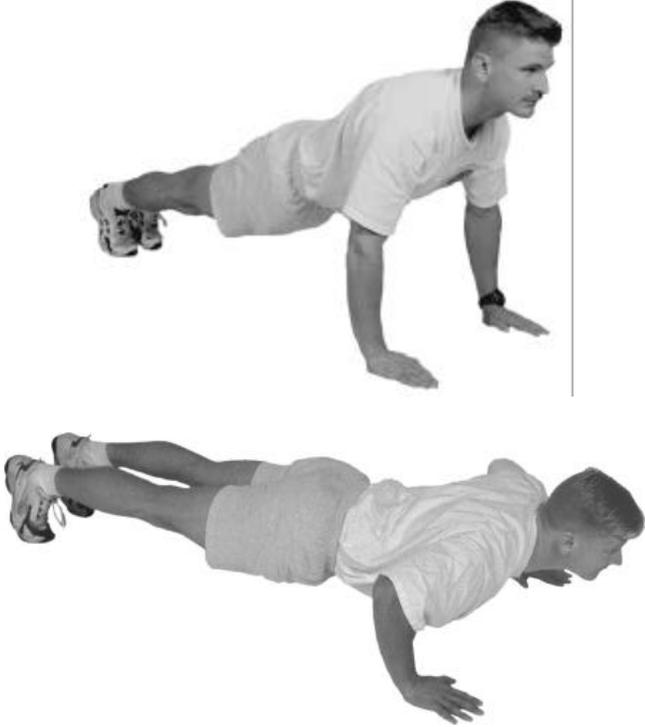
Continued next page

Annex D Stretch and Exercise Description (Continued)

Description	Example
<p>Lower Back Stretch: Lay on your back. Flex the right leg and grasp the midhigh with both hands. Gently pull knee to chest, while assuring that the left calf remains in contact with the floor. Hold for 15 seconds. Repeat for the other side.</p>	

A.2 Exercise Descriptions

The following table provides exercise descriptions with examples.

Description	Example
<p>Pushups: Assume the front lean and rest position. Place your hands approximately shoulder width apart. Your back, buttocks, and legs must be straight from head to heel. Begin the exercise by lowering your entire body as a unit until your elbows are bent at 90 degrees. Return to the start position by locking your elbows.</p>	

Continued next page

Annex D Stretch and Exercise Description (Continued)

Description	Example
<p>Sit-ups: Start the exercise by lying with your back on the floor and your thighs flexed at 45 degrees to the body plane. The knees are flexed at 90 degrees. Forearms are crossed across the chest. The feet are held by a partner or placed under a bar. Raise the body up and forward to the vertical position. After you have reached the vertical position, lower your body back to the ground. Only your lower back need touch the ground before the repetition is repeated.</p>	
<p>Pull-ups: Hang from the bar with the arms fully extended, palms facing forward. Begin by pulling yourself up until your chin is above the level of the bar. Lower yourself until the arms are fully extended, repeat the proper number of repetitions.</p> <p>NOTE: <i>Exaggerated body or knee movement that assists in getting the chin above the bar is not acceptable.</i></p>	

Continued next page

Annex D Stretch and Exercise Description (Continued)

Description	Example
<p>Chin-ups: Hang from the bar with the arms fully extended, palms facing backward. Begin by pulling yourself up until your chin is above the level of the bar. Lower yourself until arms are fully extended, repeat the proper number of repetitions.</p> <p>NOTE: <i>Exaggerated body or knee movement that assists in getting the chin above the bar is not acceptable.</i></p>	 The image contains two side-by-side photographs of a man in a white t-shirt and shorts performing chin-ups. In the left photograph, the man is hanging from a horizontal bar with his arms fully extended and palms facing backward. In the right photograph, the man is pulling himself up, with his chin positioned above the level of the bar. Both photographs show the man from a front-facing perspective, standing on a light-colored surface.

Annex E Rescue Swimmer Training “Survivor” Syllabus

TRAINING 'SURVIVOR' BRIEF/QUESTIONNAIRE

RS INITIALS

- | | | | |
|---|---------|--------|-------|
| 1. Do you have any fear of the water? | Yes____ | No____ | _____ |
| 2. Do you have any lower back problems? | Yes____ | No____ | _____ |
| 3. Do you have problems treading water? | Yes____ | No____ | _____ |
| 4. If needed, complete passenger/egress brief for specific aircraft type. | | | _____ |
| 5. Explain particular safety hazards, i.e.: H-60 ext. fuel tank, H-65 sliding door track. | | | _____ |
| 6. Explain use of RS harness. | | | _____ |
| 7. Demonstrate all RS hand signals. | | | _____ |
| 8. Explain Sling/Harness deployment. | | | _____ |
| 9. Explain Basket recovery. | | | _____ |
| 10. Explain Sling Augmented Double Pickup (SADPU). | | | _____ |
| 11. Explain Military Aviator Double Pickup (MADPU). | | | _____ |
| 12. Explain Direct Deployment and Quick Strop Procedures | | | _____ |
| 13. Explain Emergency Pickup/Bare hook recovery. | | | _____ |
| 14. Explain effects of rotorwash. | | | _____ |
| 15. Flight brief. | | | _____ |

Signature of survivor/Date

Signature of RS/Date

REMARKS:

Annex E Rescue Swimmer Training “Survivor” Syllabus (Continued)

POOL PHASE

NOTE

When completing pool phase, a minimum of two swimmers must be present.

While in the pool, complete the following:

1. Survivor, in swimsuit, will swim fifty yards. _____
2. Survivor, in swimsuit, will tread water for one minute. _____

NOTE

Failure to complete above tasks disqualifies survivor from participation in RS training operations.

3. Demonstrate and have survivor complete clearing of mask and snorkel. _____
4. Demonstrate and have survivor complete inflation of TRISAR. _____
5. Demonstrate and have survivor complete inflation and boarding of LRU-18. _____
6. Demonstrate cross-chest and cross chest control carries. _____
7. Demonstrate harness hookup for MADPU. _____
8. Demonstrate quick stop application for direct deployment. _____
9. Demonstrate placing survivor in basket. _____

Signature of Survivor/ Date

Signature of RS/ Date

Annex F Rescue Swimmer Flight Syllabus

HH-_____RESCUE SWIMMER'S SYLLABUS

QUALIFICATION REQUIREMENTS

Upon satisfactory completion of this syllabus, a member will be qualified as a Coast Guard Rescue Swimmer. This syllabus provides the minimum skills and knowledge required to perform Rescue Swimmer duties from a helicopter.

_____ has completed the Rescue Swimmer's Training syllabus and is qualified as a Rescue Swimmer on the HH-_____ Helicopter.

Instructor/Date

Annex F Rescue Swimmer Flight Syllabus (Continued)

FORWARD

The goal of this program is to provide proficient, safe and standard Rescue Swimmers. Successful rescue missions are accomplished through the coordination of skills between the pilots and crew.

You, as a Rescue Swimmer, must have a working knowledge of the equipment used aboard the helicopter. You must be familiar with and accomplished in the professional skills, techniques, and procedures used on rescue missions.

This syllabus was developed by the Rescue Swimmer Training Branch at Aviation Training Center Mobile, AL. Commanding Officers may supplement this syllabus, as required, based upon local mission requirements and operational limitations.

Any questions or comments regarding this syllabus should be addressed to the Rescue Swimmer Training Branch at ATC Mobile, (334) 441-6836.

A qualified Rescue Swimmer instructor must supervise you as you complete this syllabus to the Standard level. The instructor will indicate that an item has been Demonstrated (D), Practiced (P), accomplished to the Intermediate level (I), or accomplished to the Standard level (S). The instructor will also make written comments concerning your progress through the course and areas of needed improvement.

The grade received for each task is based upon your proficiency in accomplishing that task relative to the Coast Guard's "Standard" performance. The "Standard", or ability to perform the task, does not change with the designation held or being sought.

The Coast Guard's grading standards are described below. The required level of performance (S,I,P, or D) will be shown on the syllabus for each task.

(1) S - STANDARD - STANDARD PERFORMANCE LEVEL:

The student performed the task properly, accurately, and with complete regard for safety. The task was performed with out hesitation with few minor errors. The student must be able to maintain this proficiency without further instruction.

(2) I - INTERMEDIATE - INTERMEDIATE PERFORMANCE LEVEL:

No Critical errors. The student demonstrated a thorough understanding of the mechanics, techniques, and procedures involved in the task. The task was performed with no critical errors, but other errors kept the student from achieving the "Standard" performance level.

Annex F Rescue Swimmer Flight Syllabus (Continued)

FORWARD (Continued)

(3) P - PRACTICED:

The student was pre-briefed and practiced the task. Performance level was not yet to the "I" level.

(4) D - DEMONSTRATED - DEMONSTRATED BY THE INSTRUCTOR:

Demonstrated by an instructor. Used to introduce a new maneuver or task to a student through demonstration.

COMMENTS SECTION

- a. Purpose: The comments are intended to provide an accurate, fair, complete and consistent summary of each training session. The comments should provide sufficient detail to be useful to the student, and other instructors.
- b. Areas addressed:
 - (1) The specific task performance evaluation (grades)
 - (2) Headwork/judgement
 - (3) Procedural knowledge
 - (4) In water skills
 - (5) Rescue Swimmer duties
 - (6) Crew coordination
 - (7) Attitude, professionalism, motivation
 - (8) Recommendations to the student (techniques, areas to study, etc.)
 - (9) Recommendations for additional training or syllabus reduction due to superior performance
- c. Guidelines:
 - (1) Level "P" and "I" performance by a student during initial or upgrade qualification may have, but need not have specific comments; however, appropriate discussion items on progress should be included for each training evaluation.

Annex F Rescue Swimmer Flight Syllabus (Continued)

FORWARD (Continued)

- (2) Level "P" or "I" performance during initial or upgrade qualification which is below the required performance level after a student has previously achieved the required level for specific item should be accompanied by comments identifying the problem areas.
- (3) Anything noticeable which indicates a need for improvement either in general, or in specific maneuvers.
- (4) All level "P" and "I" performance for an item which requires an "S" on all end of syllabus evaluations should be accompanied by a detailed description of the performance.

GLOSSARY OF TERMS

- a. Critical Errors: Any error which could jeopardize the flight or the successful completion of the task.
- b. Minor Errors: Errors which detract from the standard but in no way jeopardize the flight or successful completion of the task.
- c. Task: The maneuver or activity to be performed, i.e. Free Fall or Sling deployment.
- d. Understanding: The student has grasped the intended meaning and can apply basic reasoning to discuss the topic.

Revised: November 1999

Crewmember

Annex F Rescue Swimmer Flight Syllabus (Continued)

SIGN-OFF PROCEDURES

The following example will explain how the Rescue Swimmer syllabus will be properly signed off for completion and shows how the following terms will be used:

- Required Level - The level at which the item shall be performed before completion of the task.
- Training Evolution - Three training sessions are listed in this syllabus. This is used in case the student does not complete the assigned task to the required level.
- " X " - This is used whenever the item was not attempted during the training session.

REQUIRED LEVEL

	1	2	3	TRAINING EVOLUTION
[S]	S			
[S]	X	S		
[P]	P			
[P]	D	P		
[I]	P	I		
[I]	I			
[D]	D			
[S]	X	X	S	

In the first (1) training evolution, there were items accomplished by the student to the required level indicated by the appropriate letter designation. If the student does not complete the task to the satisfaction of the instructor, then the appropriate letter would be filled in the block. If the trainee does not attempt the task at all, then the letter "X" would be used.

In the second (2) training evolution, there were items completed to their required level and the appropriate letter designation used. Only those items that did NOT meet the required level in the first session need to be evaluated and initialed. There was still one item not attempted in this evolution.

The letter "X" would be used again to show that this item still needs to be completed. In the third (3) training evolution, the final item was completed and the appropriate letter designation entered. That completes this part of the student's syllabus.

Annex F Rescue Swimmer Flight Syllabus (Continued)

SIGN-OFF PROCEDURES (Continued)

The comments section would be used to note specific areas needing improvement. Those areas can then be given direct attention during the next session.

COMMENTS

Instructor/Date _____

Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

GROUND PHASE

- I. INTRODUCTION: The ground phase provides you with a working knowledge of the aircraft equipment and Rescue Swimmer procedures required when working in the HH- _____ Helicopter.

- II. OBJECTIVES
 - A. After completing this phase, the student will be able to:
 - 1. Identify and locate listed aircraft equipment.
 - 2. Explain the use and purpose of the aircraft's rescue and survival equipment.
 - 3. Perform, from a static helicopter, all Rescue Swimmer deployments and recoveries.

NOTE

The ground phase must be completed before the flight phase is started.

Annex F Rescue Swimmer Flight Syllabus (Continued)

GROUND ONE

I. The student will demonstrate a knowledge of the location and use of the following equipment or procedures:

		1	2	3
A. SAR Board Equipment	/S	/	/	/
B. Rescue Equipment:	/S	/	/	/
1. Basket	/S	/	/	/
2. Litter	/S	/	/	/
3. Sling	/S	/	/	/
C. <i>Portable Salvage Pump</i>	/S	/	/	/
D. Aircrew Safety Harness (gunner's belt)	/S	/	/	/
E. Datum Marker Buoy	/S	/	/	/
F. Float Lights	/S	/	/	/
G. First Aid Kits	/S	/	/	/
H. Flashlights	/S	/	/	/
I. Fire Extinguisher	/S	/	/	/
J. LPU-26/PE Life Vest	/S	/	/	/
K. Life raft(s)	/S	/	/	/
L. Boom Crank	/S	/	/	/
M. Heed belt	/S	/	/	/
N. Searchlight	/S	/	/	/
O. ICS Controls, and Procedures	/S	/	/	/
P. Hoist Controls, Shear Switch and Hot Mic	/S	/	/	/
Q. Procedures for Approaching and Exiting A/C	/S	/	/	/
R. Search Procedures	/S	/	/	/

II. COMMENTS

Instructor/Signature/Date _____

Comments:

Instructor/Signature/Date _____

Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

GROUND TWO

Requirement: Helicopter
 Hydraulic Jenny
 Hoist Operator
 Unit Instructor

I. The student will demonstrate knowledge of the following procedures:

A. Signals:	<i>1</i>	<i>2</i>	<i>3</i>
1. Hand signals (DAY)	/ D /	/ /	/ /
2. Signals (NIGHT)	/ D /	/ /	/ /
3. Emergency signals (DAY & NIGHT)	/ D /	/ /	/ /
B. Rescue Swimmer Procedures:			
1. Deployments			
a. Free Fall	/ D /	/ /	/ /
b. Sling/Harness	/ D /	/ /	/ /
c. Direct Deployment:	/ D /	/ /	/ /
(1) Quick Strop (Surv. facing RS & back to RS)	/ D /	/ /	/ /
(2) Direct Deployment Hand Signal	/ D /	/ /	/ /
(3) Procedures for entering the aircraft with surv.	/ D /	/ /	/ /
(4) Vertical Surface Approach Procedures	/ D /	/ /	/ /
(5) Double Lift for Hypothermic Survivors	/ D /	/ /	/ /
(6) Proper Hoist Hook Sequence	/ D /	/ /	/ /
(7) Direct Deploy procedures video	/ D /	/ /	/ /
(8) Physical Grip (Emergencies only)	/ D /	/ /	/ /
2. Recoveries:			
a. Rescue basket	/ D /	/ /	/ /
b. Litter	/ D /	/ /	/ /
c. Emergency pickup (BARE HOOK TO RS HARNESS)	/ D /	/ /	/ /
d. Military aviator double pickup (OPEN SLING ON LARGE HOOK)	/ D /	/ /	/ /
e. SADPU	/ D /	/ /	/ /
3. Emergencies:			
a. Lost swimmer (DAY/NIGHT)	/ D /	/ /	/ /
b. Leaving swimmer on scene	/ D /	/ /	/ /

II. COMMENTS

Instructor/Signature/Date _____
 Comments

Annex F Rescue Swimmer Flight Syllabus (Continued)

GROUND TWO (Continued)

III. PRACTICE-with static helicopter:

A. Deployments	1	2	3	
1. Free Fall	/ P	/	/	/
2. Sling/Harness	/ P	/	/	/
3. Direct Deployment:	/ P	/	/	/
a. Quick strop	/ P	/	/	/
b. Direct deployment hand signals	/ P	/	/	/
c. Procedure for entering the aircraft with surv.	/ P	/	/	/
d. Vertical surface approach procedures	/ P	/	/	/
e. Double lift for hypothermic survivor	/ P	/	/	/
f. Proper hoist hook sequence	/ P	/	/	/
g. Direct deployment procedures video	/ P	/	/	/
h. Physical grip (emergencies only)	/ P	/	/	/
B. Recoveries:				
1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY)	/ P	/	/	/
2. Military aviator double pickup / SADPU (OPEN SLING ON LARGE HOOK)	/ P	/	/	/
3. Harness	/ P	/	/	/

IV. COMMENTS-Required

Instructor/Signature/Date _____

Comments:

Instructor/Signature/Date _____

Comments:

Instructor/Signature/Date _____

Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

FLIGHT PHASE

I. INTRODUCTION

The flight phase is designed to help you achieve proficiency, standardization, and safety when acting as a Rescue Swimmer.

II. OBJECTIVES

A. After completing this phase, the student will be able to:

1. Explain hoist operation and standard hoisting terminology.
2. Assist the Flight Mechanic during boat hoists.
3. Perform all Rescue Swimmer deployments and recoveries, both day and night.

Annex F Rescue Swimmer Flight Syllabus (Continued)

FLIGHT ONE LAND

I. FLIGHT PREPARATION

WARNING

SIMULATED HOIST EMERGENCIES SHALL NOT BE
CONDUCTED DURING LIVE HOISTS.

1 2 3

A. BRIEFING - discuss:

- | | | | | |
|------------------------|-----|---|---|---|
| 1. Aircraft in general | /D/ | / | / | / |
| 2. Flight controls | /D/ | / | / | / |
| 3. Crew duties | /D/ | / | / | / |
| 4. Hoisting | /D/ | / | / | / |

II. FLIGHT

A. Pilot will demonstrate and explain:

- | | | | | |
|-----------------------------|-----|---|---|---|
| 1. Flight controls | /D/ | / | / | / |
| 2. AFCS off flight | /D/ | / | / | / |
| 3. All cockpit instruments | /D/ | / | / | / |
| 4. Circuit breakers | /D/ | / | / | / |
| 5. AN/ Navigation Equipment | /D/ | / | / | / |
| 6. Single engine landings | /D/ | / | / | / |

B. Flight Mechanic will demonstrate and explain:

- | | | | | |
|---|-----|---|---|---|
| 1. Hoist operation- with standard phraseology | /D/ | / | / | / |
| 2. Use of hydraulic override | /D/ | / | / | / |
| 3. Student will assist instructor on two basket hoists | /S/ | / | / | / |
| 4. FM will lower and hoist student once in
slings and basket | /S/ | / | / | / |

III. DEBRIEFING - discuss:

- | | | | | |
|----------------------------|-----|---|---|---|
| A. Day's flight | /S/ | / | / | / |
| B. Review of SAR equipment | /S/ | / | / | / |
| C. Fouled cable procedure | /S/ | / | / | / |
| D. Search procedures | /S/ | / | / | / |
| E. Refueling | /S/ | / | / | / |

IV. COMMENTS-Required

Instructor Signature/Date _____

Comments:

Instructor Signature/Date _____

Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

FLIGHT TWO DAY BOAT

I. FLIGHT PREPARATION

WARNING

SIMULATED HOIST EMERGENCIES SHALL NOT BE CONDUCTED DURING LIVE HOISTS.

- | A. BRIEFING - discuss: | 1 | 2 | 3 |
|---|-----|---|-----|
| 1. Hoisting to a boat with and without the use of a trail line. | /S/ | / | / / |
| 2. Being hoisted to vsl via sling with trail line & quick disconnect. | /S/ | / | / / |
| 3. Trail line tending. | | | |

II. FLIGHT

- | | | | |
|--|-----|---|-----|
| A. Student will observe boat hoists from cabin. | /S/ | / | / / |
| B. Flight Mechanic will deploy student via trail line. | /S/ | / | / / |
| C. Student will tend trail line during hoists to boat. | /S/ | / | / / |
| D. Flight mechanic will hoist student from boat using rescue basket. | /S/ | / | / / |

III. DEBRIEFING - discuss:

- | | | | |
|------------------------|-----|---|-----|
| A. Day's flight | /S/ | / | / / |
| B. Passenger briefing | /S/ | / | / / |
| C. Signaling: | | | |
| 1. Signal mirror | /S/ | / | / / |
| 2. MK-124 signal flare | /S/ | / | / / |

IV. COMMENTS-Required

Instructor Signature/Date_____

Comments:

Instructor Signature/Date_____

Comments:

Instructor Signature/Date_____

Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

FLIGHT THREE DAY WATER

I. FLIGHT PREPARATION

WARNING

SIMULATED HOIST EMERGENCIES SHALL NOT BE CONDUCTED DURING LIVE HOISTS.

- | | | | |
|---------------------------------|-----|---|---|
| A. BRIEFING - discuss: | 1 | 2 | 3 |
| 1. Rescue Swimmer hand signals | /S/ | / | / |
| 2. Lost Swimmer procedures | /S/ | / | / |
| 3. Direct Deployment operations | /S/ | / | / |

II. FLIGHT

- | | | | | |
|--|-----|---|---|---|
| A. Perform: | | | | |
| 1. Free Fall deployment with basket pickup for survivor and swimmer. | /S/ | / | / | / |
| 2. Sling deployment with basket pickup for survivor and emergency pickup for swimmer BARE HOOK TO RS (HARNESS OR BASKET). | /S/ | / | / | / |
| 3. Free Fall deployment w/military aviator double pickup (OPEN SLING ON LARGE HOOK) / SADPU. | /S/ | / | / | / |
| 4. Direct Deployment to the water w/conscious survivor. | /S/ | / | / | / |
| 5. Direct Deployment to the water, using a physical grip pickup to ten feet above water, lowered back to water complete DD of an unconscious survivor. (crotch strap). | /S | / | / | / |
| 6. Direct Deployment w/ Double lift recovery w/cantenary. | /S/ | / | / | / |

III. DEBRIEFING - discuss:

- | | | | | |
|--------------------------|-----|---|---|---|
| A. Day's flight | /S/ | / | / | / |
| B. Equipment maintenance | /S/ | / | / | / |
| C. Review hand signals | /S/ | / | / | / |

IV. COMMENTS-Required

Instructor Signature/Date _____
Comments:

Instructor Signature/Date _____
Comments:

Instructor Signature/Date _____
Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

FLIGHT FOUR NIGHT WATER & QUALIFICATION

I. FLIGHT PREPARATION

WARNING

**SIMULATED HOIST EMERGENCIES SHALL NOT BE CONDUCTED
DURING LIVE HOISTS.**

NOTE

For night relocation training Rescue Swimmer will be in one-man life raft
within sight of surface vessel. Surface vessel will have all lights out

A. BRIEFING - discuss:	1	2	3
1. Rescue Swimmer hand signals	/ S/	/	/ /
2. Night emergency signals	/ S/	/	/ /
3. Night Rescue Swimmer operations	/ S/	/	/ /
4. Rigging and use of chemical lights	/ S/	/	/ /

II. FLIGHT

A. Perform			
1. Sling deployment with basket pickup for survivor and swimmer.	/ S/	/	/ /
2. Sling deployment with basket pickup for survivor and emergency pickup for swimmer (BARE HOOK TO RS HARNESS OR BASKET).	/ S/	/	/ /
3. Sling deployment with military aviator double pickup (OPEN SLING ON LARGE HOOK).	/ S/	/	/ /
4. Direct Deployment unconscious survivor	/ S/	/	/ /
5. Direct Deployment w/double lift recovery	/ S/	/	/ /
6. Night relocation:			
a. Using strobe light	/ S/	/	/ /
b. Using MK-124 signal flare	/ S/	/	/ /
c. Using radio to vector aircraft	/ S/	/	/ /

III. DEBRIEFING - discuss:

A. Night's flight	/ S/	/	/ /
B. Equipment maintenance	/ S/	/	/ /

IV. COMMENT-Required

Instructor Signature/Date_____

Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

FLIGHT FOUR NIGHT WATER & QUALIFICATION (Continued)

Instructor Signature/Date _____

Comments:

Instructor Signature/Date _____

Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

VERTICAL SURFACE QUALIFICATION OPTIONAL

I. FLIGHT PREPARATION

WARNING

SIMULATED FLIGHT EMERGENCIES SHALL NOT BE
CONDUCTED DURING LIVE HOISTS

A. Briefing- discuss:	1	2	3
1. Direct deployment equipment	/S/	/	/
2. Direct deployment hand signals	/S/	/	/
3. Emergency signals and Procedures	/S/	/	/
4. Direct Deployment operations	/S/	/	/

II. FLIGHT

A. Perform:				
1. Direct Deployment to a vertical surface, using cliff walking techniques complete a DD of a rescue mannequin facing toward the RS.	/S/	/	/	/
2. Direct Deployment to a vertical surface, using cliff walking techniques complete a DD of a rescue mannequin facing away from the RS.	/S/	/	/	/

NOTE

If a vertical surface is not available in a geographical area it is not required to be completed and shall be noted in the comments section of this syllabus.

III. DEBRIEFING - discuss:

A. Post Flight Gear	/S/	/	/	/
B. Review Hand Signals	/S/	/	/	/

IV. COMMENTS-Required

Instructor/Signature/Date _____
Comments:

Instructor/Signature/Date _____
Comments:

Instructor/Signature/Date _____
Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

ABBREVIATED TRANSITION SYLLABUS FOR THE HH-____ AIRCRAFT

This syllabus is intended for Rescue Swimmers who are currently qualified as a Rescue Swimmer in the HH-____. Commandant (G-OAV) has determined that a minimum of one daylight swimmer deployment flight is necessary to qualify each swimmer prior to operational deployments from the HH-____. The Unit's Commanding Officer may require additional day or night flights for the purpose of enhancing safety and HH-____ operational familiarization.

I. OBJECTIVES

- A. After completing the ground phase, the swimmer will be able to:
1. Perform, from a static helicopter, all Rescue Swimmer deployments, and recoveries.
 2. Complete emergency egress training in type aircraft.

NOTE

The ground phase must be completed before the flight phase is started.

_____ has completed the HH-____ Rescue Swimmer Transition Syllabus and is qualified as a RESCUE SWIMMER on the HH-____ Helicopter.

_____/_____
Instructor Date

Annex F Rescue Swimmer Flight Syllabus (Continued)

TRANSITION SYLLABUS GROUND PHASE

Requirement: Helicopter
Hydraulic Jenny
Hoist Operator
Unit Instructor

I. The student will demonstrate knowledge of the following procedures:

A. Signals:	1	2	3
1. Hand signals (DAY)	/D/	/	/ /
2. Signals (NIGHT)	/D/	/	/ /
3. Emergency signals (DAY & NIGHT)	/D/	/	/ /
B. Rescue Swimmer Procedures:			
1. Deployments:			
a. Identify snag hazards	/D/	/	/ /
b. Free Fall	/D/	/	/ /
c. Sling	/D/	/	/ /
2. Recoveries:			
a. Rescue Basket	/D/	/	/ /
b. Litter	/D/	/	/ /
c. Emergency pickup (BARE HOOK TO RS HARNESS)	/D/	/	/ /
d. Military aviator double pickup (OPEN SLING ON LARGE HOOK)	/D/	/	/ /
e. Available cabin handholds	/D/	/	/ /
3. Emergencies:			
a. Lost swimmer (DAY/NIGHT)	/D/	/	/ /
b. Leaving swimmer on scene	/D/	/	/ /

II. PRACTICE - with static helicopter:

A. Deployments:			
1. Free Fall	/P/	/	/ /
2. Sling	/P/	/	/ /
B. Recoveries:			
1. Emergency pickup (BARE HOOK TO RS HARNESS TO DEMONSTRATE HARNESS CAPABILITY)	/P/	/	/ /
2. Military aviator double pickup (OPEN SLING ON LARGE HOOK)	/P/	/	/ /

III. Complete Emergency Egress training in type aircraft. /P/ / / /

III. COMMENTS-Required

Instructor/Signature/Date _____

Comments:

Annex F Rescue Swimmer Flight Syllabus (Continued)

TRANSITION SYLLABUS FLIGHT PHASE (DAY WATER)

I. INTRODUCTION

The flight phase is designed to help you achieve proficiency, standardization, and safety when acting as an HH-_____ Rescue Swimmer.

II. OBJECTIVES

- A. After completing this phase, the student will be able to:
1. Perform all Rescue Swimmer deployments and recoveries.

III. FLIGHT PREPARATION

WARNING

**SIMULATED HOIST EMERGENCIES SHALL NOT BE CONDUCTED
DURING LIVE HOISTS**

- | | | | | |
|--------------------------------|------|---|---|---|
| A. Briefing-discuss: | | 1 | 2 | 3 |
| 1. Rescue swimmer hand signals | / S/ | / | / | / |
| 2. Lost swimmer procedures | / S/ | / | / | / |

IV. FLIGHT

- | | | | | |
|--|------|---|---|---|
| A. Perform: | | | | |
| 1. Free Fall deployment with basket pickup for survivor and swimmer | / S/ | / | / | / |
| 2. Sling deployment with basket pickup for survivor and emergency pickup for swimmer (BARE HOOK TO RS HARNESS OR BASKET) | / S/ | / | / | / |
| 3. Free Fall deployment with military aviator double pickup (OPEN SLING ON LARGE HOOK) | / S/ | / | / | / |
| 4. Direct Deployment with conscious survivor | / S/ | / | / | / |
| 5. Direct Deployment w/hypothermic pickup | / S/ | / | / | / |

V. DEBRIEFING - discuss:

- | | | | | |
|-----------------------------|------|---|---|---|
| A. Day's flight | / S/ | / | / | / |
| B. Aircraft radio vectoring | / S/ | / | / | / |

VI. COMMENTS-Required

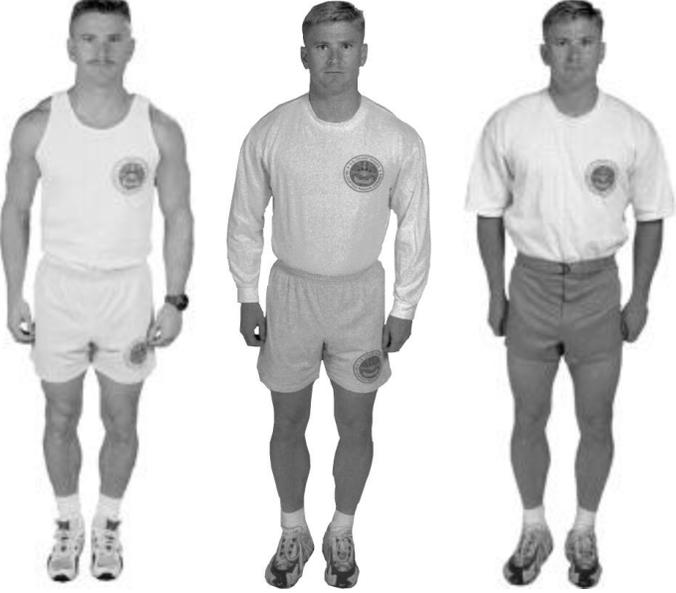
Instructor Signature/Date _____

Comments

Annex G Rescue Swimmer PT and Deployment Clothing

A.1 Physical Training Uniforms

The following table provides physical training uniform descriptions with examples.

Description	Example
<p>RS PT Uniform: Plain white Beefy "t", tank top, long , or short sleeved shirt with RS logo and gray cloth running shorts. Plain white socks and athletic shoes. For pool workout: UDTs, Mask, snorkel, fins and booties.</p>	 <p style="text-align: center;">PT Uniform Winter Uniform Swim Uniform</p>
<p>Cold Weather PT Uniform: Plain white Beefy "t", long or short sleeved, with RS logo and gray cloth running shorts. Crew neck or hooded sweatshirt and sweat pants. Plain white socks and athletic shoes. Black gloves and watch cap are optional.</p>	 <p style="text-align: center;">Crew Neck Hooded</p>

Continued next page

Annex G Rescue Swimmer PT and Deployment Clothing (Continued)

A.2 Deployment Ensembles

Description	Example
<p><u>Direct Deployment (land):</u> Flight suit or Anti Exposure Flight Garment, vibram soled boots (non-steel toed), helmet with the visor down, flight gloves, TRI-SAR harness, with quick strop.</p>	
<p><u>Direct Deployment (water):</u> Appropriate wet/dry suit, mask, fins, snorkel, TRI-SAR harness, with quick strop.</p>	

Continued next page

Annex G Rescue Swimmer PT and Deployment Clothing (Continued)

Description	Example
<p><u>Water Deployment (below 55° F):</u> Dry suit, mask, fins, snorkel, TRI-SAR harness. Hood or surf cap with SOLAS grade retro-reflective tape is required at night.</p>	 <p data-bbox="878 989 1263 1077">Tri-Laminate Dry Suit Water Ensemble (below 55° F)</p>
<p><u>Water Deployment (above 55° F):</u> Full length wet suit, mask, fins, snorkel, TRI-SAR harness. Hood or surf cap with SOLAS grade retro-reflective tape is required at night.</p>	 <p data-bbox="878 1766 1263 1801">Water Ensemble (above 55° F)</p>

Continued next page

Annex G Rescue Swimmer PT and Deployment Clothing (Continued)

Description	Example
<p><u>Warm Water</u> <u>Deployment:</u> One piece 3/2mm wet suit or shorty wet suit. Mask, fins, snorkel, TRI-SAR harness.</p>	<div style="display: flex; justify-content: space-around; align-items: center;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> Shorty Wet Suit 3/2 mm Wet Suit </div>
<p>Hood or surf cap with SOLAS grade retro-reflective tape is required at night. The Seda Helmet with SOLAS grade-reflective tape is required for all deployments to surf, or swift water.</p>	<div style="display: flex; flex-direction: column; align-items: center; justify-content: center;">  <p data-bbox="979 1377 1169 1409" style="margin: 5px 0;">Wet Suit Hood</p>  <p data-bbox="992 1791 1156 1822" style="margin: 5px 0;">Seda Helmet</p> </div>

Annex H Rescue Swimmer Authorized Equipment List

NOTE

Following extensive review by G-WPM, G-CFM and G-LGL, the physical training clothing in this annex has been authorized by the Coast Guard Rescue Swimmer Program Manager (under Commandant's authority). Substitution of this clothing of a lesser quality than what is prescribed is prohibited without the approval of the Coast Guard Rescue Swimmer Program Manager.

1. This list is the only authorized equipment to be used when performing the duties of a Helicopter Rescue Swimmer.
2. AST's may purchase this equipment as often as life limits allow or when the item is found to be unserviceable (A/R means As Required).
3. While this list contains known sources of supply it is not intended to limit competition nor is it a basis for sole source procurement.
4. Where options are available, it is up to the individual RS to determine which piece of equipment to use.

Equipment	Source (& item number)	Life Limit
Mask, silicone - Clear - prescription	Sea Vision P/N SV1202C P/N PF1202C	A/R
Snorkel, black	Sea Vision P/N SN1200C	A/R
Harness, Rescue Swimmer	Lifesaving Systems Corp. P/N 487-O	7 Years
MK-124 Signal Flares	Local USCG District Armory 1370-00-115-3532	A/R
Four inch chem. lights	6260-00-106-7478	A/R
J Hook Knife	1670-00-779-1253	A/R
Knife, PBR	Benchmade Knife Co. P/N 9000S Black-T	A/R
Flashlight	Open Purchase	A/R

Continued next page

Annex H Rescue Swimmer Authorized Equipment List (Continued)

Equipment	Source (& item number)	Life Limit
Radio, Rescue Swimmer Uniden 940 VHF-FM radio	Lesco Distributing 1 800 444 8896 Talley Communications Corp. 1-562-906-8000	A/R
Signal Mirror, Plastic	6850-00-105-1252	A/R
Swim Fins, Rockets	U.S. Divers (Open Purchase)	A/R
Trail Line Quick Disconnect	Lifesaving Systems Corp. P/N 619	A/R
Equipment Bag, RS	Lifesaving Systems Corp. P/N 304-CG	A/R
Wet Suit Ensemble, Neoprene 5/3 Long jumpsuit	Henderson Aquatics	24 months
Warm Water Ensembles, Neoprene 3/2 Shorty 3/2 Long Jump suit	Henderson Aquatics	24 months
Dry suit Ensembles 2 EA (water temps 55° F or less)	DUI P/N G-USCG-3	24 months
Booties, wet suit 1 pr	Open purchase NOTE Good grade neoprene wet suit booties comparable to or better than Henderson Gripper Booties or U.S.Divers Aqua Track.	24 months
Surf Cap	Henderson Aquatics P/N T-CG01	24 months

Continued next page

Annex H Rescue Swimmer Authorized Equipment List (Continued)

Equipment	Source (& item number)	Life Limit
Gloves, wet suit 2 pr	Open purchase NOTE Good grade neoprene gloves comparable to or better than: IHK 5 MM Diving Glove, Glacier Glove, U.S. Divers 3 MM Aqua Grip glove, Henderson Gripper, or Comfo Gloves. RS's choice depending on climate.	24 months
Gloves, dry suit 2 pr	Open purchase NOTE Good grade neoprene or latex rubber gloves comparable to or better than: IHK 5 MM Diving Glove, or DUI Dry Five Glove. RS's choice depending on climate.	24 months
Belt, Safety, Crewman	1680-00-211-7356	7 Years
Chem. light safety straps 6 ea.	Lifesaving Systems Corp. P/N 230	7 Years
Shorts, UDT 3 pr size 32 34 36	8415-00-455-6349 8415-00-455-6350 8415-00-455-6351	24 months
Shorts, Ash gray PT 3 pr	Open Purchase NOTE Mid thigh bicycle shorts with rescue swimmer logo on left leg.	24 months

Continued next page

Annex H Rescue Swimmer Authorized Equipment List (Continued)

Equipment	Source (& item number)	Life Limit
Watch (with second hand)	Open Purchase (Not to exceed \$100.00.)	A/R
Shirts, PT White heavy-duty 3 ea. Long , short sleeved or Tank Top	Open Purchase NOTE 100 Percent cotton white "T" shirt or Tank Top with rescue swimmer logo on left breast.	24 months
Suit, Sweats Ash gray 3 ea.	Open Purchase NOTE Crew neck and/or hooded sweat top with rescue swimmer logo on left breast, and sweat pants.	24 months
Shoes, workout 1 pr	Open Purchase NOTE High quality athletic shoe that the individual can use to participate in physical fitness training not to exceed \$100.00 per pair.	6 Months
Socks, white crew 3 pr	Open Purchase	6 Months
Name Tags	Open Purchase NOTE 1" Wide blue cotton webbing with white 3/4" lettering to be place on: RS Harness, on the outside of the back strap; RS bag, centered on top parallel to carrying handle; gunners belt, centered between snap hook and adjustable friction adapter.	A/R

Continued next page

Annex H Rescue Swimmer Authorized Equipment List (Continued)

Equipment	Source (& item number)	Life Limit
Undergarments, dry suit: Exotherm I, II, and III's Thermolux I, II, and III DUI Undergarments	Open purchase USIA USIA DUI	A/R
Poly propylene underwear: Top Bottom	8415-00-227-9549 8415-00-227-9544	A/R
Nomex Long underwear: Top Bottom	8415-00-485-6548 8415-00-467-4076	A/R
Exotherm dry suit socks	USIA	A/R
Wool Socks	8440-00-153-6717	A/R
Face Mask (Vert. Surface Ops.) Paintball / motocross	Open Purchase	A/R
Undergarment, Anti Chaffing	Open purchase	A/R
Boots, vertical surface ops	Summer: TLS Model 800, Aqua-Force Model # 2069, and Eliminator 2 Model # 8036, Winter: TLS Model L770, Wonder Boot Model # 5066, and Eliminator 2 Model # 8132	A/R
Sleeves, signal 1 pr	Lifesaving Systems Corp.: P/N 465	7 Years
Neck Ring, dry suit	Open purchase	7 Years
Seda Helmet, Whitewater (Required for surf rescues)	Open purchase	A/R
Patches: CG Rescue Swimmer 2 ea. CG EMT 2 ea.	Open purchase (Fully authorized by HQ as required organizational SAR identification clothing)	A/R
Goggles, swimmer	Open purchase	A/R

Continued next page

Annex H Rescue Swimmer Authorized Equipment List (Continued)

1. The following list of equipment is authorized in order to support the rescue swimmer program. These items do not need to be maintained by individual RS's.

Equipment	Source (& item number)	Life Limit
Rescue Mannequin	From PMX at 800-453-1264, GSA Contract 02F1424H	A/R
ICE OPERATIONS EQUIPMENT		
Rescue rope equipment bag	California Mountain Co. P/N 431101	A/R
Rescue rope, 250 feet	California Mountain Co. P/N L75321	A/R
Carabiner, steel locking	California Mountain Co. P/N 321001	A/R
Safety belt	1680-00-211-7356	A/R
Ice awls	W.Born Assoc., INC. P/N Pick of Life	A/R
Ice cleats	Cabelas Co. P/N 85537-002/6	A/R
Mukluk liner	8415-00-177-7994	A/R
Mukluk	8430-00-269-0100	A/R
DISENTANGLEMENT TRAINING EQUIPMENT		
Vest, SV-2	8415-00-139-6174	A/R
Canopy, Parachute	1670-00-554-6413	A/R
Koch, Lap Female	1670-00-997-6662	A/R
Koch, Lap Male	1670-00-986-8334	A/R
Koch, Shoulder Female	1670-00-886-6878	A/R
Koch, Shoulder Male	1670-01-093-0191	A/R

Continued next page

Annex H Rescue Swimmer Authorized Equipment List (Continued)

Equipment	Source (& item number)	Life Limit
Harness, Torso	1670-01-130-3123	A/R
Seat Pan	Locally Fabricated	A/R
	<p>EMERGENCY MEDICAL EQUIPMENT</p> <p>NOTE</p> <p>This list is the minimum requirement to support the EMT mission. Different areas of operation may require special equipment not included on this list and should be procured by the unit. Procurement of equipment not listed costing more than \$100.00 requires HQ approval.</p>	
Bag-Valve Mask	Life Support Products P/N W18119	A/R
Resuscitator, Oxygen	Life Support Products P/N 175-010	A/R
Laerdal Suction Kit V-Vac	Dyna Med. IncV	A/R
Cylinder, Oxygen "D" size M-22	Life Support Products P/N 349-040	A/R
Antishock Trousers	Open Purchase	A/R
Traction Splint	Open Purchase	A/R
Cervical Collars	Open Purchase	A/R
Medevac Board	Lifesaving Systems Corp. P/N 450	A/R

Continued next page

Annex H Rescue Swimmer Authorized Equipment List (Continued)

Equipment	Source (& item number)	Life Limit
Medevac Report Form	7530-01-GF2-9080 (CG-5214 rev. 10-88)	A/R
Victims/Casualty Hypothermia Bag	Wiggy's Inc.	A/R
EMT Kit, Thomas Pack	Aeromed P/N TT890	A/R
Automatic External Defibrillator (AED): Heartstream Forerunner Model E01 – HP CC Carrying Case (Semi-Rigid) – HP DP5 Extra Pads – HP ECI Data Card (30 minutes ECG and Event) – HP BT1 Battery Pack	6515-01-459-3831 6515-01-459-4432 6515-01-459-4407 6515-01-459-3838 6515-01-459-4417	A/R
Current EMT Text (Currently used by EMT School)	Open Purchase	A/R
	The following is information on procurement and mandatory stowage of EMT equipment in the Thomas Pack.	
COMPARTMENT 1 Outside: Blood pressure cuff Stethoscope Pen Light Latex Gloves Scissors	6515-01-039-4884 or Open Purchase 6515-00-935-4088 or Open Purchase 6239-00-125-5528 or Open Purchase Open Purchase 6515-01-030-4465	A/R
COMPARTMENT 2 Outside: SAM Splint	 6515-01-225-4681	A/R

Continued next page

Annex H Rescue Swimmer Authorized Equipment List (Continued)

Equipment	Source (& item number)	Life Limit
	The following is the continuation of information on procurement and mandatory stowage of EMT equipment in the Thomas Pack.	
COMPARTMENT 3 Outside: Airway Kit, Oropharyngeal Airway Kit, Nasalpharyngeal Pocket Mask	Open Purchase Open Purchase Open Purchase	A/R
COMPARTMENT 4: Ace Wrap	6510-00-935-5822	A/R
COMPARTMENT 5: Band-Aid, adhesive Charcoal, Activated Glucose, Oral Syrup of Ipecac Bulb Syringe Cord Clamps Umbilical Tape	6510-00-913-7909 6505-00-135-2881 or Open Purchase 6505-01-243-2676 or Open Purchase 6505-00-926-9197 or Open Purchase 6530-00-110-1854 or Open Purchase 6515-00-890-1541 or Open Purchase 6515-00-379-2100 or Open Purchase	A/R
COMPARTMENT A Inside: Battle Dressing, small Battle Dressing, Med. Battle Dressing, Large	6510-00-159-4883 6510-00-201-7430 6510-00-201-7425	A/R
COMPARTMENT B Inside: Bandage, Gauze Water Gel, Burn Kit Petroleum Gauze Sponges, Surgical, 4x4	6510-00-582-7992 Coast Guard kit (201) 507-8325 6510-00-202-0800 or Open Purchase 6510-00-721-9808	A/R
COMPARTMENT C Inside: Cravat, Bandage	6510-00-201-1775	A/R

Continued next page

Annex H Rescue Swimmer Authorized Equipment List (Continued)

Equipment	Source (& item number)	Life Limit
	The following is the continuation of information on procurement and mandatory stowage of EMT equipment in the Thomas Pack.	
COMPARTMENT D Inside: Plastic Bag Adhesive, tape, 2" Adhesive, tape, 1	8105-00-837-7755 6510-00-926-8883 6510-00-926-8882	A/R
INNER COMPARTMENT Inside: Collar, Cervical No-neck, small, medium, large - 1 of each	Open Purchase Open Purchase	A/R
INNER COMPARTMENT E, F, & G: Band-Aid Thermometer 94-108F and/or Electronic Ear Canal Thermometer Ball Point Pen	6515-00-913-7909 6515-00-149-1405 or Open Purchase 7520-00-935-7135 Open Purchase	A/R

Annex I Rescue Swimmer Training Record and Screening Exam

HELICOPTER RESCUE SWIMMER TRAINING RECORD AND PHYSICAL TRAINING SCREEN EXAM

Maintain RS recurrent training records for at least 18 months.

Refer to COMDTINST M3710.4 Coast Guard Helicopter Rescue Swimmer Manual for explanation of each category.

- NOTE:
- (1) 3 minute warm-up, pre exercise stretches, cool down, post exercise stretches shall be incorporated into all workouts, including the monthly screen exam.
 - (2) Proper exercise form, IAW M3710.4, shall be enforced.
 - (3) DO NOT exercise to muscle failure on rescue swimmer duty days.
 - (4) All swims shall be performed in appropriate gear, IAW M3710.4

NAME:	RESCUE SWIMMER MINIMUM TRAINING REQUIREMENTS					
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
Monthly Requirements:						
Shoulder Width Pushup, (50 min)						
Sit ups, (60 min)						
Pull-ups, (5 min)						
Chin-ups (5 min)						
12-minute Crawl Swim (500 yd min.)						
25-yd Underwater Swim (x4)						
200-yd Buddy Tow						
Administered By: (Sign and Date)						
Lifesaving Drills						
EMT Lecture (3 hrs per quarter)						
EMT Practical (3 hrs per quarter)						
Quarterly Requirements:						
Direct Deployment (x2)						
Sling Deployment (x2)						
Free Fall Deployment (x2)						
Semi-Annual Requirements:						
Aircraft Vectoring						
Litter						
Harness & Parachute Disentanglement						
Annual Requirements:						
Stan Check						
Date of Last Stan Check						
EMT Re-Cert Date						

NAME:	RESCUE SWIMMER MINIMUM TRAINING REQUIREMENTS					
	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Monthly Requirements:						
Shoulder Width Pushup, (50 min)						
Sit ups, (60 min)						
Pull-ups, (5 min)						
Chin-ups (5 min)						
12-minute Crawl Swim (500 yd min.)						
25-yd Underwater Swim (x4)						
200-yd Buddy Tow						
Administered By: (Sign and Date)						
Lifesaving Drills						
EMT Lecture (3 hrs per quarter)						
EMT Practical (3 hrs per quarter)						
Quarterly Requirements:						
Direct Deployment (x2)						
Sling Deployment (x2)						
Free Fall Deployment (x2)						
Semi-Annual Requirements:						
Aircraft Vectoring						
Litter						
Harness & Parachute Disentanglement						
Annual Requirements:						
Stan Check						
Date of Last Stan Check						
EMT Re-Cert Date						

Blank Page

Annex J Rescue Swimmer SDAP Certification

HELICOPTER RESCUE SWIMMER SDAP CERTIFICATION

SAMPLE MESSAGE

R ____Z JAN 01

FM COGARD AIRSTA _____

TO COMDT COGARD WASHINGTON DC//G-OCA//

INFO CCGD _____

BT

UNCLAS//N12550//

SUBJ: HELICOPTER RESCUE SWIMMER SPECIAL DUTY ASSIGNMENT PAY

A. COMDTINST M3710.4 (Series), HELICOPTER RESCUE SWIMMER MANUAL

B. COMDINST 1430.1 (Series)

1. IN ACCORDANCE WITH REF (A), THE FOLLOWING IS A LIST OF ALL OPERATIONAL RESCUE SWIMMERS WHO MET THE ELIGIBILITY REQUIREMENTS SET FORTH IN REF (B) AND RECEIVED SDAP DURING THE 20__ CALENDAR YEAR:

AST1 _____

AST1 _____

AST2 _____

AST2 _____

AST2 _____

AST3 _____

AST3 _____

AST3 _____

2. THE FOLLOWING RESCUE SWIMMERS ARE CURRENTLY DESIGNATED AS OPERATIONAL RESCUE SWIMMERS, MEET THE ELIGIBILITY CRITERIA OF REF (B) AND ARE DRAWING SDAP:

AST1 _____

AST1 _____

AST2 _____

AST2 _____

AST3 _____

AST3 _____

